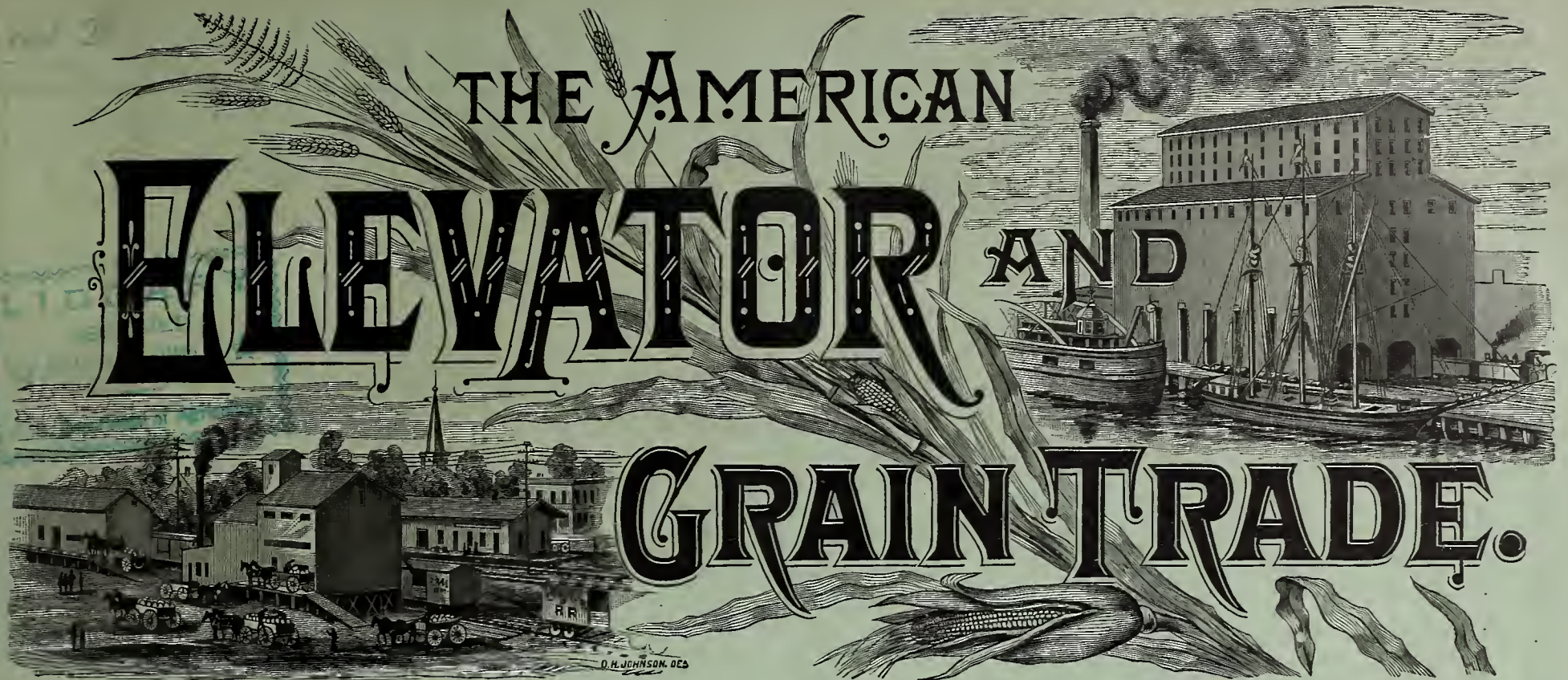


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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XXIV.

CHICAGO, ILLINOIS, NOVEMBER 15, 1905.

No. 5.

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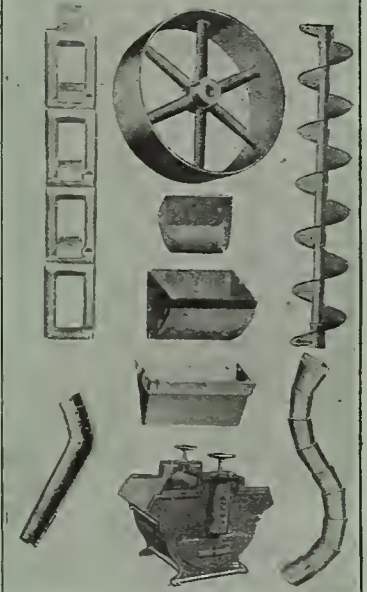
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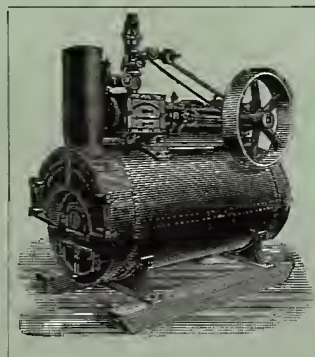
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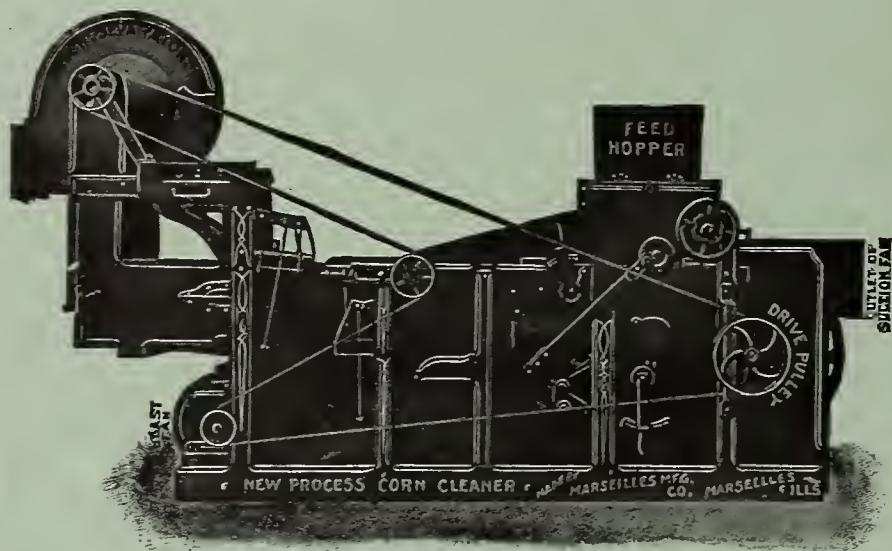
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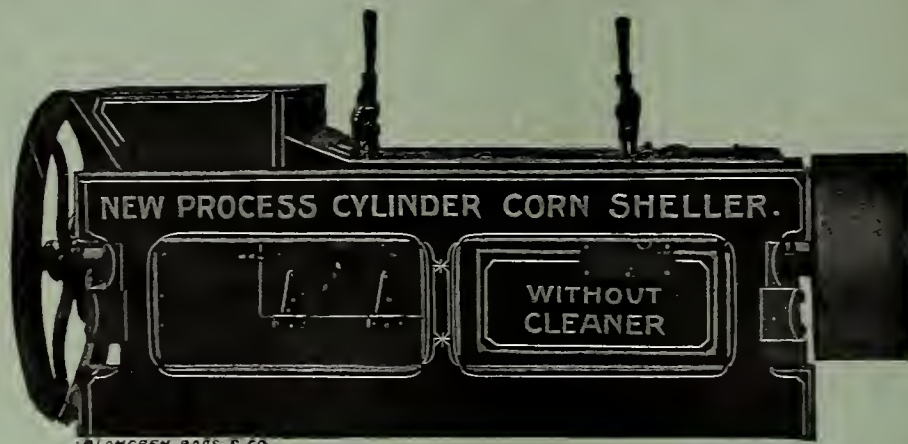
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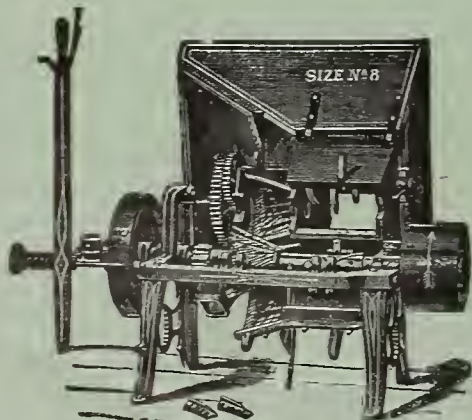
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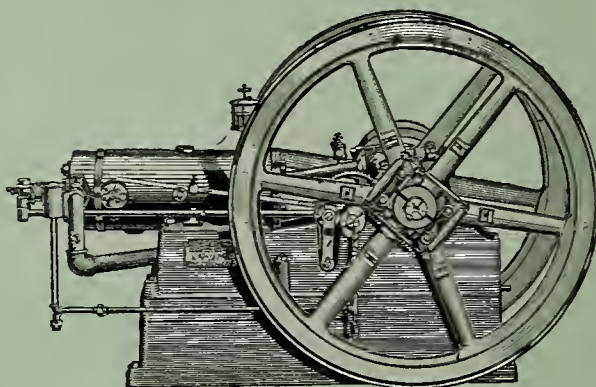
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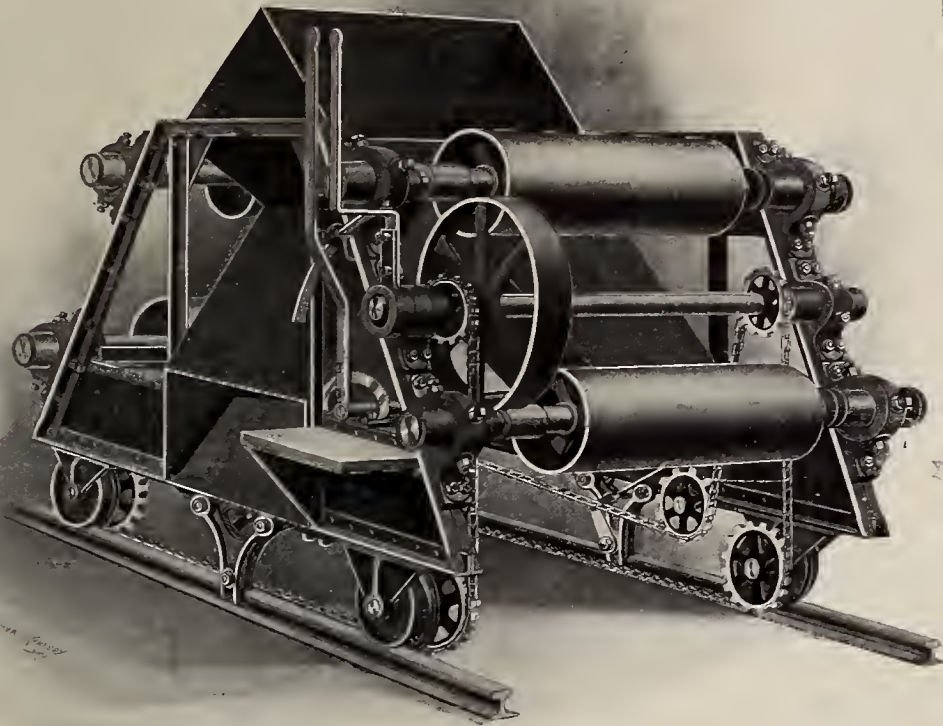
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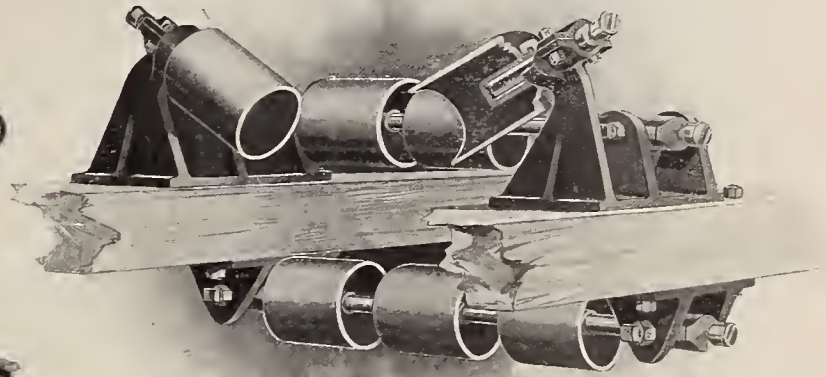
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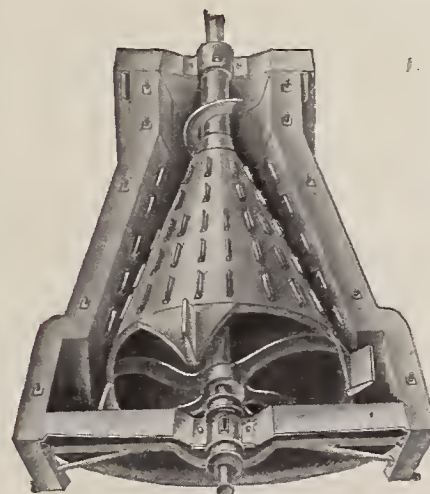
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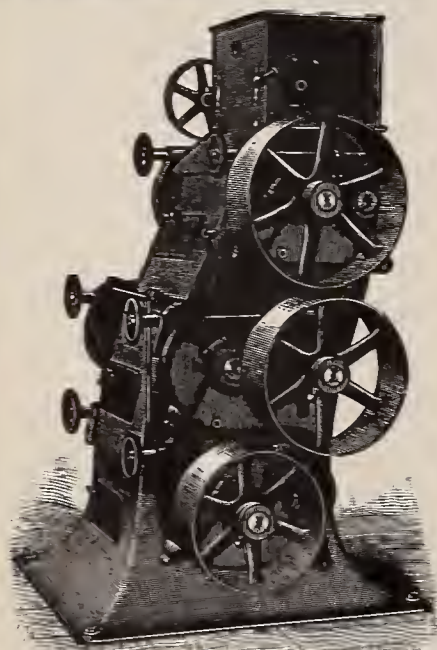
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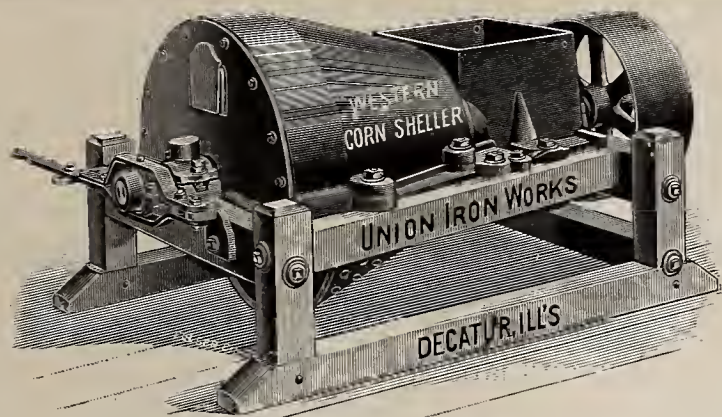
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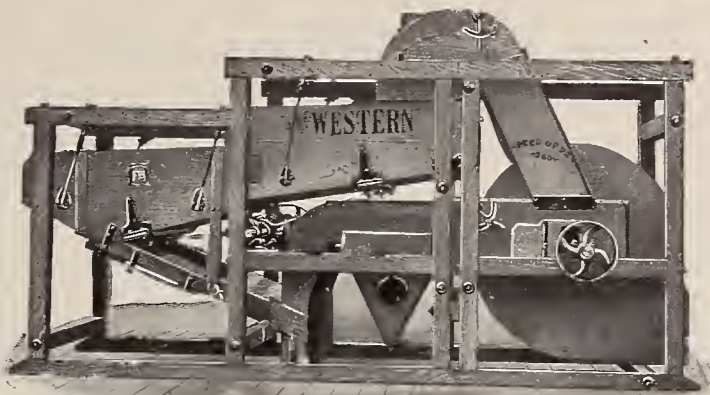
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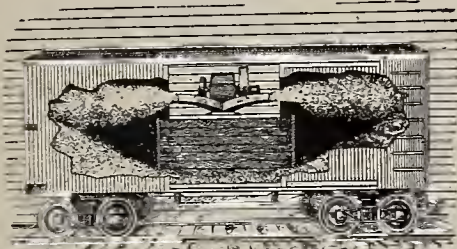
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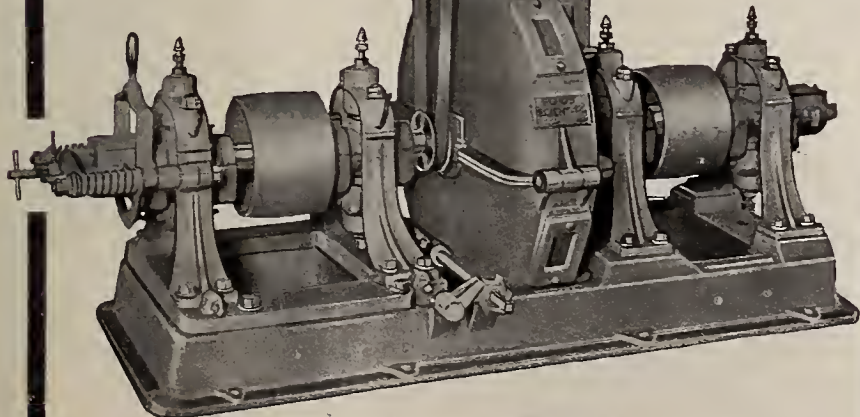
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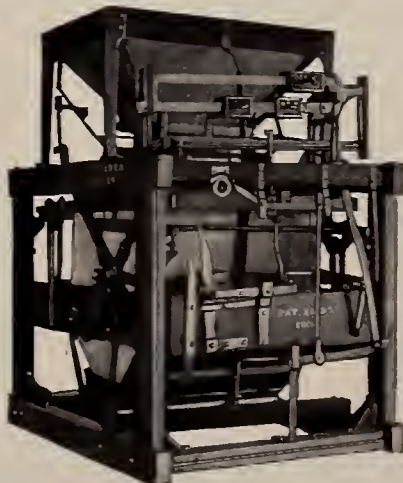
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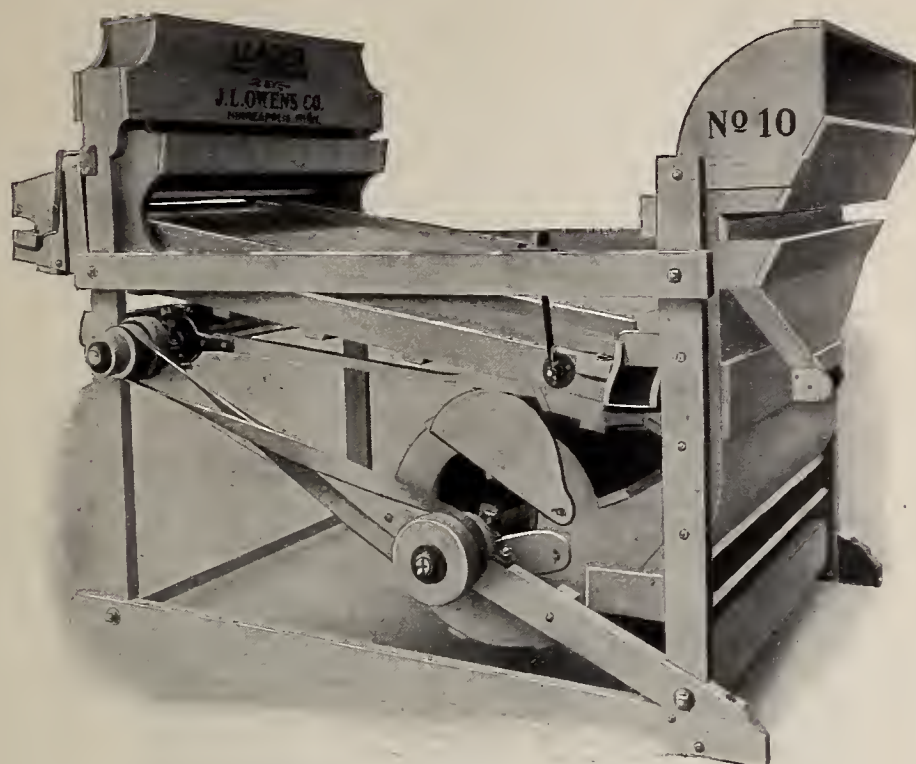
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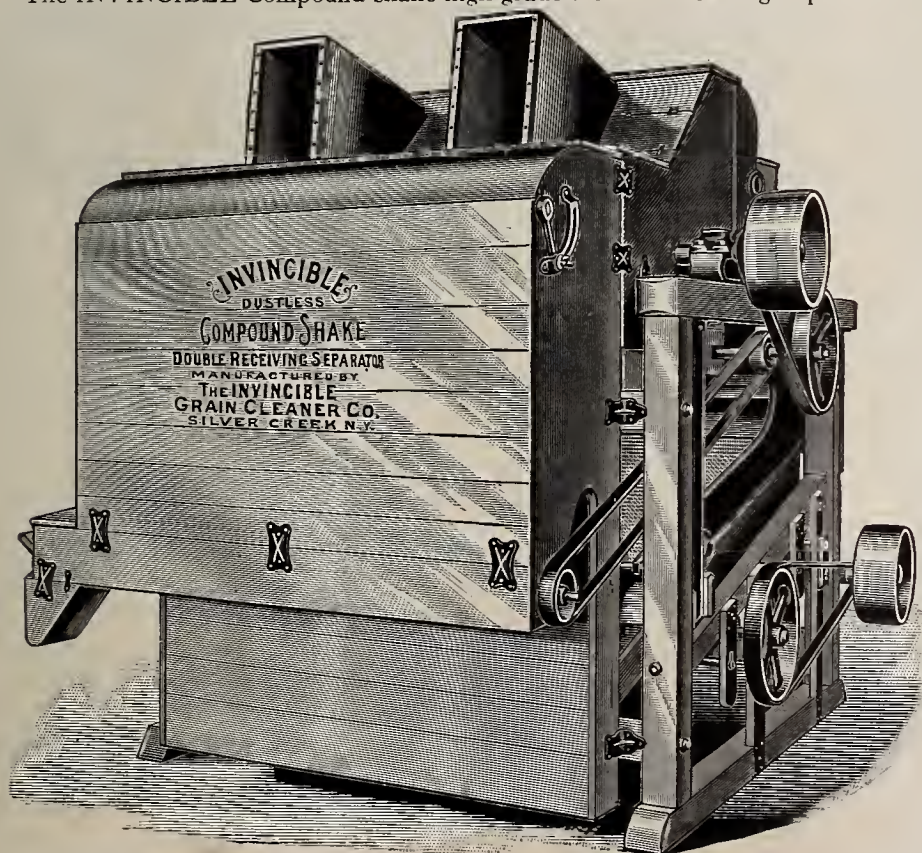
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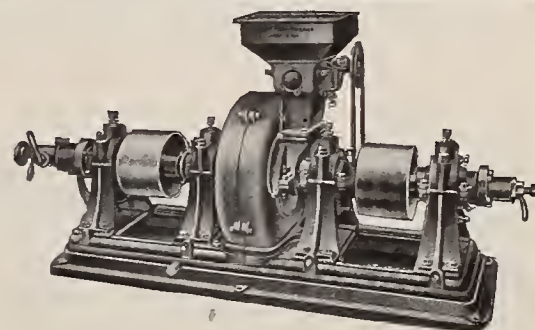


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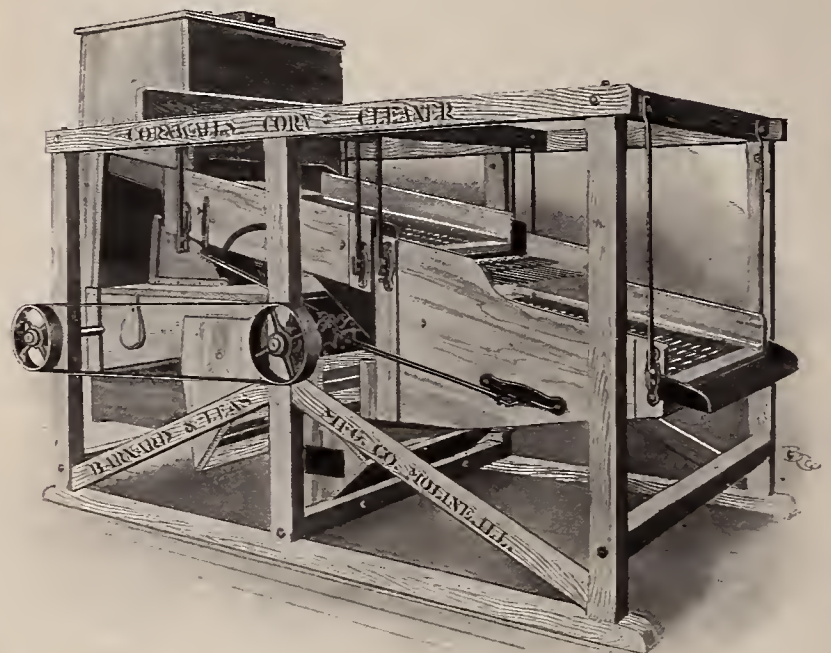
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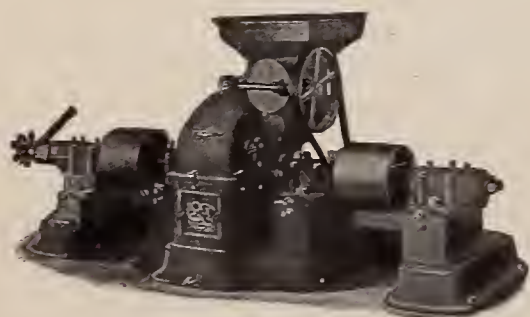
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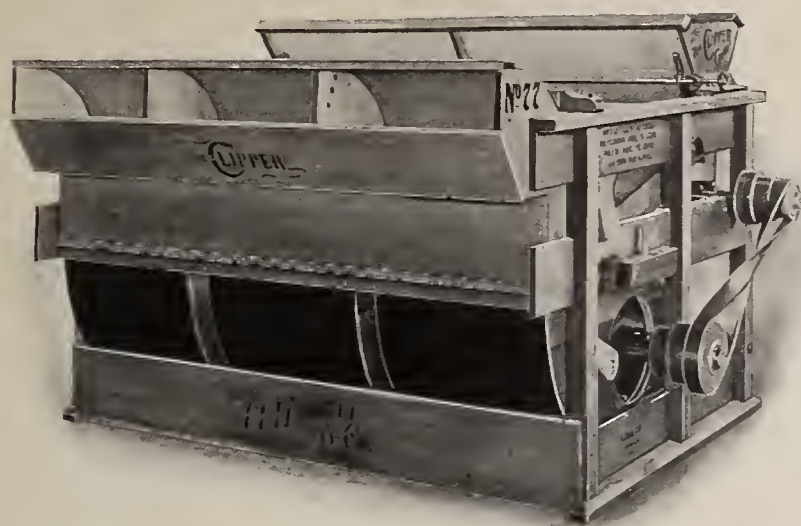
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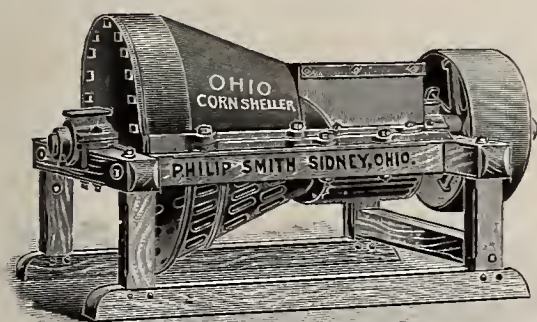
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THE WEST LEADS IN EVERYTHING

Western people are continually working to make things "just a little bit better." They hustle day in and day out, keeping their business methods strictly up to date. That's why they keep ahead.

For more than thirty years it has been our policy to build and equip grain elevators, "a whole lot better" than the other fellow, and we have done it. That's why we have so many satisfied patrons. Are you one? If not, get in line to-day by sending us your specifications.

GREAT WESTERN MFG. CO.
LEAVENWORTH, KANSAS

CALCIUM CHLORIDE

Anti-Freezing Solution

For Gasoline Engines and Fire Barrels

Absolutely **neutral**. Will **not rust**. Has **no effect on metal** of any kind. Freezing point **54 degrees below zero**. **Never precipitates nor evaporates**. You don't have to refill fire barrels. It's permanent.

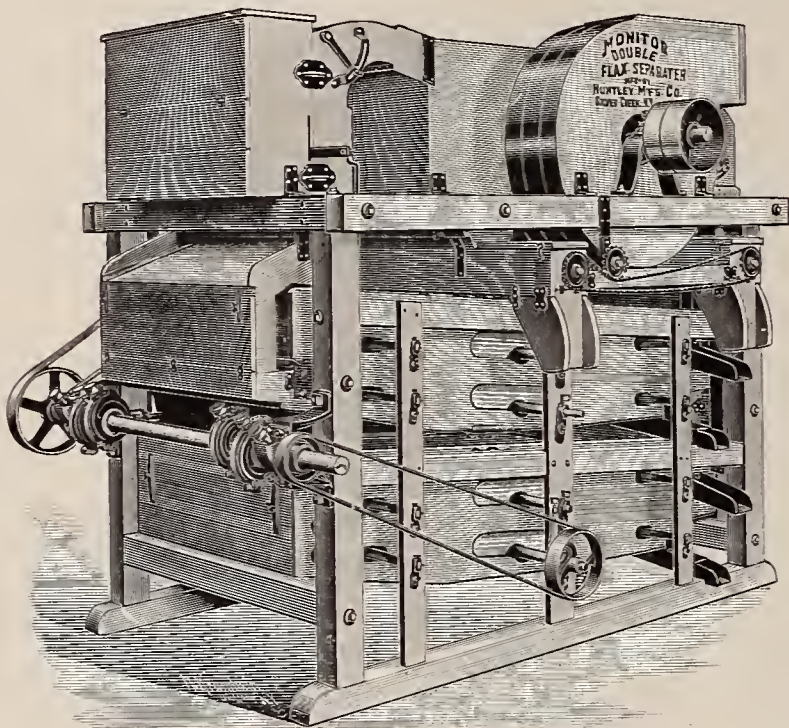
We give a SALOMETER FREE

to all our customers. Write us direct for prices and full information. We manufacture a special grade for gas engines.

James H. Rhodes & Co.
217 East Kinzie Street CHICAGO, ILL.

The Best Device for Cleaning Flax is Pictured Here

If you will stop a moment and do a little figuring on the amount of flax that you handled last season—about the average number of pounds of dockage per bushel of flax shipped, how much you got out of it and the amount of freight you paid on this—if you will do these things it will not take much argument on our part to convince you that the purchase of a MONITOR FLAX SEPARATOR will put good money in your pocket; will mean the saving of a goodly sum to you.



Examine This Cut of The Monitor Dustless Double Flax Separator Style A

This separator is two complete and separate machines in one frame, driven by one belt. Each machine is so complete that flax and wheat, or other grain, could be cleaned separately on the Separator at the same time.

Perfect Counterbalance

Steady Running

READ WHAT USERS SAY OF THEM

Huntley Mfg. Co., Silver Creek, N. Y.
Blabon, N. D., May 31, 1904.
Dear Sirs—In answer to your letter of the 19th inst., asking as to how we are pleased with your machine for cleaning flax, we would say that our buyer at Blabon advises us that for flax cleaning your machine is all that could be desired.
Respectfully,
BLABON FARMERS' ELEVATOR CO.,
By James D. Brown.

Huntley Mfg. Co., Silver Creek, N. Y.
Minneapolis, Minn., May 24, 1904.
Gentlemen—We have been using your Flax Cleaners at the different linseed oil mills we have been running for the past six years, and have not had an idle hour on their account in all that time, neither have we had any expense attached to them in the way of breakage. They are always ready to do their work and the capacity is unlimited.
We have used reels and various flax cleaners for the past fifteen years, and all of them are failures when compared to yours.
We wish to compliment you on how well your machine is balanced, as the knock and jar to most cleaners is enough to drive one out of business.
Very respectfully yours,
DANIELS LINSEED CO.

Huntley Mfg. Co., Silver Creek, N. Y.
Lake Benton, Minn., May 23, 1904.
Gentlemen—About nine months ago we put up a new elevator in connection with our mill, in which we installed one of your Monitor Double Flax Separators, which has given excellent satisfaction.
We had looked over the field of different makes of separators before buying and concluded that you had the best separator on the market to clean all kinds of grain and do perfect work. We are now satisfied that your machine comes as near being perfect as it can be.
Yours truly,
LAKE BENTON MILLING CO.

Huntley Mfg. Co., Silver Creek, N. Y.
Sleepy Eye, Minn., May 21, 1904.
Gentlemen—Your favor of the 19th inst. received. In reply will state that we have been using one of your Flax Cleaners in our cleaning house since 1901, and the same gives good satisfaction. We find that this machine will clean from 450 to 500 bushels per hour.
Yours truly,
SLEEPY EYE MILLING CO.

MONITOR FLAX SEPARATORS are furnished in five different styles. Send for our TREATISE ON FLAX CLEANING that tells all about them. A postal card will bring it.



HUNTLEY MFG. CO.

SILVER CREEK, N.Y. U.S.A.

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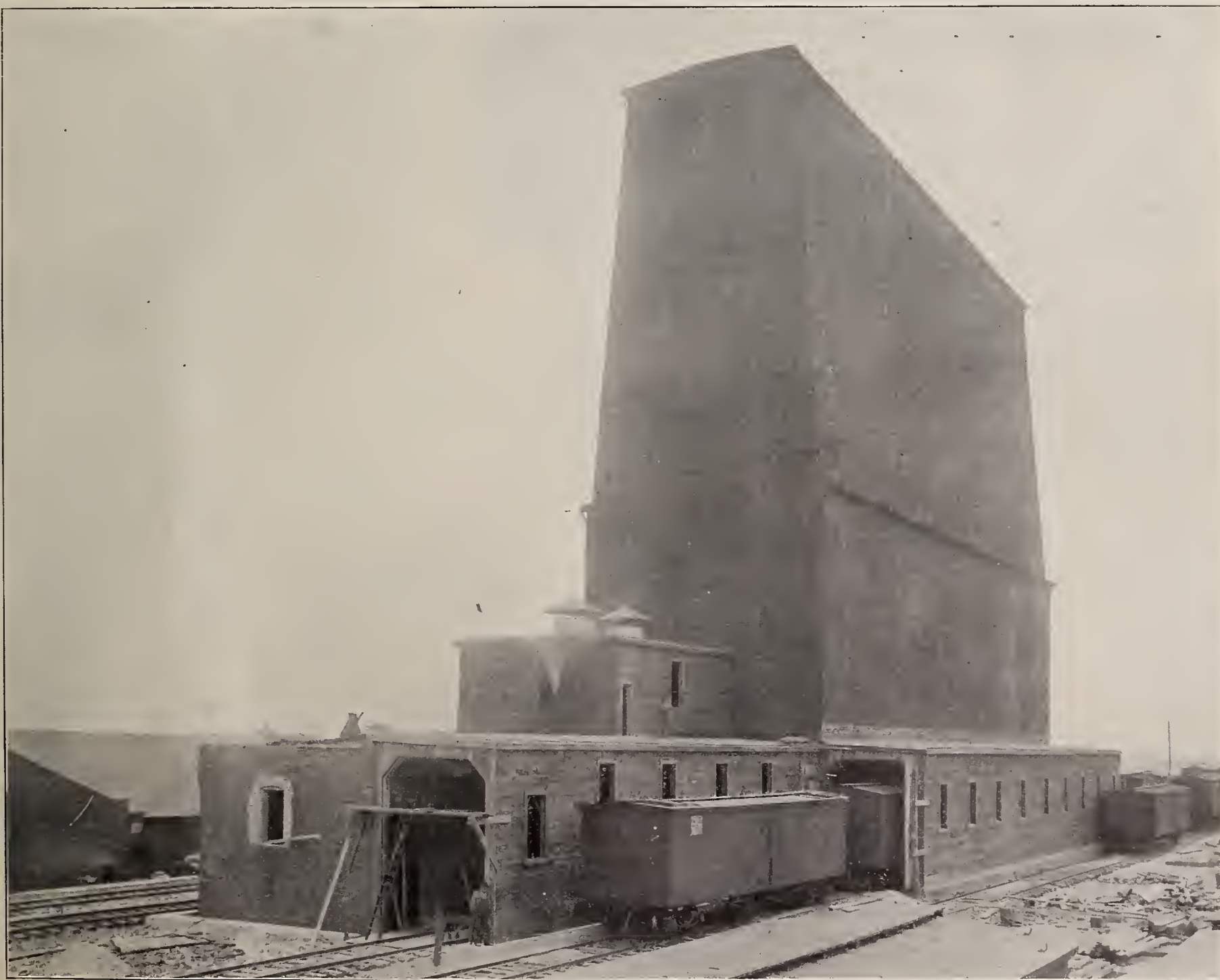
A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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CHICAGO, ILLINOIS, NOVEMBER 15, 1905.

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SINGLE COPY, TEN CENTS.



INTERSTATE ELEVATOR, ERIE RAILROAD YARDS, AT FIFTY-FIRST AND WALLACE STREETS, CHICAGO.
Remodeled under the Direction of Stephens & Tyler, Engineers, Chicago, Ill.

REMODELED INTERSTATE ELEVATOR.

The Interstate Elevator, located in the Erie Railroad yard, at Fifty-first and Wallace streets, Chicago, has been undergoing alterations and repairs under the direction of Stephens & Tyler, consulting engineers, Monadnock Block, Chicago. These changes were made necessary by the elevation of the tracks of the entire Erie yard to make the elevator conform to the track elevation. The elevator was built about eight years ago by the John S. Metcalf Co. and is about the only elevator in Chicago which is adapted for track elevation without raising the elevator itself.

The elevator proper is 36 feet wide by 120 feet long, and has a capacity of about 100,000 bushels.

The receiving track originally ran through the west wing of the house, and the shipping track was covered by a dust house, which extended the length of the building on the east side. The tracks

A new system has been installed for taking care of dust and offal, all of which is now sacked and sold. The old engine room has been used for this purpose and the old boiler room will shortly be converted into a purifying and drying plant.

A concrete retaining wall about 18 feet from the base to the top was built around the entire plant, and a new brick office and controller room constructed at the south end of the building. The superintendent's office is also in this building. The basement of the car-puller room is used for the fire pump, high tension line entrance, transformers, and conduit distribution. A new stairway was constructed outside of the building at the south end and the bin which was formerly used for stair well and rope drive has been hopped in, adding about 5,000 more bushels storage to the plant.

A new double-drum cable car-puller was installed in the car-puller room, operated by an electric motor, which will easily pull twenty loaded cars.

This is the first electric elevator in Chicago and



MOTOR CONTROL ROOM, INTERSTATE ELEVATOR, CHICAGO.

have all been elevated about 13 feet and the receiving track now runs on the outside of the building and is housed in a new track shed.

The entire steam plant, consisting of three 125-horsepower vertical boilers, a pair of Buckeye Automatic Engines and a steel stack 5 feet in diameter and 130 feet high, have been entirely removed, as the plant will be operated wholly by electric motors. The above engineers have just completed a 2,000-horsepower power station for the Chicago & Western Indiana R. R. Co., which is about a quarter of a mile distant, and the elevator has been equipped with fourteen motors aggregating 500 horsepower and will get its current for these motors from the C. & W. I. power station. This station is of ample capacity so that the elevator may be run twenty-four hours per day at full capacity, or if it is not in operation, the fixed expense is at a minimum.

The motors are all controlled from a control board which is located at the south end of the elevator in the car-puller room. When it is desired to run an elevator or machine in any part of the house, the operator has but to press a button which indicates a number on the annunciator on the switchboard, this number corresponding to the number on the switch. The switchboard tender puts the motor in operation. If the operator of the machine or elevator desires to stop same, either for repairs, adjustment or completion of work, he has but to press another button which automatically releases the current from the motor, so that the consumption of current ceases immediately as the requirements cease.

can probably handle, clean and transfer grain cheaper than any house in Chicago.

The photographs having been taken while the repairs were in progress, the illustrations show the plant in a rather unfinished condition, especially the motor control room, which shows a bundle of wires in the left foreground, which are entirely absent in the finished building.

FAST TIME WITH CORN.

The German steamer Alexandria sailed on October 23 from Boston with 39,000 bushels of corn on board for Germany, being Boston's first grain consignment that way for over a year. This fact as well as the time made by the grain in transit, rather than the size of the lot, makes the shipment interesting.

"This lot of corn came originally from Chicago and was transported by vessel to Buffalo, where the car blockade stopped further progress for a time," says the Globe.

"Through the efforts of Alexander Stewart, representing the J. Rosenbaum Grain Co., the shippers, special arrangements were made to get this cereal to the seaboard (via New York Central and B. & A.) in order that there should be no delay to the steamer in sailing. The consignment left Buffalo on a Thursday night and in 48 hours from the time it started it was in the hold of the steamer. P. J. O'Toole, the local representative of the shippers, says that the forwarding and loading of this lot of corn was the quickest on record."

Send us the grain news from your neighborhood.

RATE MEETING AT ST. LOUIS.

A large number of grain shippers of St. Louis, the South and the Southeast met with traffic managers of the lines interested, at the Southern Hotel, St. Louis, on November 1, with a view to readjusting grain rates at the Ohio River and Mississippi crossings. The conference was the outcome of a suggestion made by Commerce Commissioner Clements after the close of the hearing by the Commerce Commission of the complaints of the shrinkage system at Louisville.

The following lines were represented at the conference: Southern, Mobile & Ohio, Illinois Central, Louisville & Nashville, St. Louis & San Francisco, Nashville, Chattanooga & St. Louis, Yazoo & Mississippi Valley, Cincinnati, New Orleans & Texas Pacific.

Mr. J. B. Magee of Cairo presided over the conference and Mr. A. Brandeis of Louisville acted as secretary. The following cities were represented: St. Louis, Chicago, Cincinnati, Louisville, Cairo, Evansville, Memphis, Nashville and Henderson. Among those who took part in a discussion of the problem were George F. Powell, W. B. Harrison, Maxwell Kennedy, A. P. Richardson, E. L. Wagoner, F. P. Brockmann, O. A. Orvis, E. B. Bartlett and A. F. Versen, representing the St. Louis interests; C. T. Ballard and S. Zorn, representing Louisville; J. B. Early and E. E. Williamson, Cincinnati; H. L. Halliday, Cairo; E. B. Boyd, Chicago Board of Trade Traffic Bureau; E. M. Kelly and John C. Shofner, Nashville; J. S. Davant, Memphis Freight Bureau; C. M. Ballitt, Henderson; E. H. Young, Evansville.

The greater part of the day was spent in discussion, but at 7 o'clock p. m. it was found to be impracticable to harmonize the conflicting interests, and as no agreement could be reached on a basis that would be satisfactory to all cities, the conference came to an end.

It appears that written reports were submitted to the conference by each of the three gateways, to wit: One by St. Louis, Evansville, Henderson, Cairo, Memphis and Nashville, another by Louisville and another by Cincinnati. The majority report, which expressed the opinion of five cities, recommended discontinuance of the present shrinkage system, the refunding of bridge tolls and a reduction of the rates from Louisville and Cincinnati on Southeastern and Carolina shipments to 1 cent per 100 pounds below the rate from Cairo. The Louisville report recommended the maintenance of the present shrinkage system and an increase in the maximum of shrinkage of 2 cents per 100 pounds on shipments from Illinois points through the St. Louis gateway. The Cincinnati report endorsed the Louisville report, but favored the specification of details by the railroads.

As anticipated, the railways took the position that there was "no basis for a rate adjustment," the Southern System being especially emphatic and is regarded as responsible for the failure to reach an agreement, and at the suggestion of the Louisville delegates the conference adjourned sine die.

After adjournment it was said in the lobby that St. Louis, Cairo and Memphis would take their cause to the Commerce Commission as soon as possible.

A North Dakota farmer who grew a succotash of spelt and oats reports a yield of 82½ bushels to the acre, counting 42 pounds to the bushel.

On October 27 ten ships were chartered at Portland, Ore., to load wheat. They will take about 1,000,000 bushels. The rate was 27s. 3d. (\$6.54) loading at Portland, or 26s. 3d. (\$6.30) if loaded at Sound ports.

Clearances of oats at seaboard points Friday the 10th instant, are said to be the largest in the history of the United States. Clearances were 988,666 bushels. Receipts at the seaboard were 355,649 bushels for the same day.

[For the "American Elevator and Grain Trade."]

OATS AND THE N. E. G.

BY HARRY W. KRESS.

In my last report on Toledo inspection, I did not have time to take up the subject of new oats. There seems to be a great deal of discontent among shippers in regard to the grading of oats. Before drawing any hasty conclusions the shipper should stop and consider whether he is buying them according to the rules of the market he is shipping them to. How many shippers are thoroughly posted in this respect? If a shipper is going to buy them at the grade he establishes at his own station, he will have cause to ask his doctor to prescribe for him some anti-kicking medicine. I would diagnose his case as "hay fever and loss of sight"; and my prescription would be to send him to the inspection yards at Toledo for a few weeks and have him get into all the cars, which would enable him to get the benefit of the scented odor to cure his hay fever; and put on colored eyeglasses to see whether he could distinguish black from white, and bleached from lodged oats.

I know there are exceptions to this rule; but I can't for the life of me see where he is being done any injustice on grading here at Toledo. When shipping to this market I know I was no exception, when it came to kicking; but since "seeing is believing," I am convinced that I was buying my oats from the farmers according to the grade I established. Every shipper should have the books of rules from the markets he ships to, and post himself as thoroughly as possible, especially on those grades that he is handling most of.

And right here I want to say that I hope I will see the time when we will have uniform grades in every receiving market in the United States, or as close to that basis as it would be feasible to work on. This will make it an easy matter for the shipper to become familiar with the different grades and will be a study in which he may in time become thorough; whereas to-day there is too much variation, which is confusing to him.

There is no doubt in my mind that this has been a very hard year for the shipper to buy oats and make a profit. Oats are coming in here bleached, stained, lodged, dirty, off color, mixed with foreign grain, damp and musty, and sometimes warm and hot. If the above conditions would only represent a rare car, it would be a different story, but such is not the case; and I want to say the inspectors are having a hard proposition before them—no enviable position to my mind; for if the inspector is lenient with the shipper, the buyer calls him; and if lenient with the buyer, the shipper calls him. (I do not say what he calls him, but it would not be hard to guess.) The bulk of the oats after arriving at Toledo are clipped and scoured, making them lose their original identity, and are then sold by weight or sample. This is what the shipper who handles a large amount of oats should do instead of sending them in their natural state. There is not a doubt in my mind that this is the profitable way to handle oats, whether the grades be off or not. However, be careful in buying your oats from the farmer, and you may yet hit a profit gait.

As there seems to be a great deal of difference of opinion as regards the general rule of N. E. G. (which stands for No Established Grade), and having the opportunity of observing this grade every day, I have decided to take up the issue. As much attention as I have given this grade, I am at "sea" at times as to its application. It seems to me that this grade covers too large a field. I think the sooner the grade is abolished the better it will be for the shipper. Why? Because two-thirds of them do not grasp its meaning.

For instance, we will say a shipper sends in a car of oats that is too badly mixed with foreign grain to grade 2, 3 or 4, but at the same time

this car may contain a goodly portion of No. 2 but is classed N. E. G. He ships in another car of oats that are musty, dirty, shrunken, bleached, stained, mixed with foreign grain, and is not good enough for any grade, and it is also classed as N. E. G. This last car being lots worse than the first, but still classed as N. E. G., makes it apparent how large a field the grade covers.

N. E. G. seems to attach a stigma to it which makes it appear in anything but a healthy condition to the buyer. It is natural for the shipper to suppose that the buyer of either the above mentioned cars is going to buy them at as big a discount as possible. I do not wish to be understood that the shipper is not paid more or less for the first car than the second; but from the shipper's standpoint, why not separate this N. E. G. grade into two or three distinct classes of Nos. 1, 2 and 3

INDIANAPOLIS BOARD OF TRADE.

The Indianapolis Board of Trade has decided to erect a new building and has employed H. C. Brubaker and W. H. Eldridge, associate architects and engineers of Indianapolis, to prepare the plans and specifications. The perspective of the building these gentlemen have designed is shown in the accompanying engraving, made from a photograph of the drawing, kindly furnished by them.

The building will stand at the corner of Meridian and Ohio Streets, occupying the site of the old Pyle Hotel. The frontage on Meridian Street will be 100 feet and that on Ohio Street 120 feet. The main entrance will be on Meridian Street, but there will also be an entrance on Ohio Street. The south elevation, most of which will be in



DESIGN FOR THE NEW INDIANAPOLIS CHAMBER OF COMMERCE.

Rejected, and have a more uniform discount, as in the case of Nos. 2, 3 and 4 Red wheat, thus alleviating the skepticism now prevailing?

Some shippers think it stands for "No Earthly Good" and others "Neglected;" so I have decided that a puzzle indeed is "N. E. G." It may well stand for "Neglected" when the buyer has perfected the usual price of neglected, when the shipper's stuff is accepted, which makes him dejected as to the meaning of "neglected"; the inspector is suspected, the receiver is subjected to the shipper's objection; so what's the use of kicking unless this grade "Neglected" be ejected and classed as rejected, and so be protected instead of neglected?

I think the above solution to the puzzle may mean something to the buyer and receiver as well as the shipper.

The receipts of new corn are becoming heavier; and I am agreeably surprised at its good condition.

Three steamers sailed from Brooklyn on October 25, all laden with durum for Mediterranean ports, in all about 275,000 bushels.

plain view from the monument, will be finished in the same style as the street fronts.

The first floor of the building will be arranged for storerooms. The upper floors will be used for offices. The Board of Trade assembly rooms, committee rooms and club rooms will be on the seventh and eighth floors. All apartments will be well lighted. The light court will be finished in enameled brick.

The building will be eight stories high, a modern steel fireproof structure with exterior walls of stone or terra cotta. The cost will be about \$300,000 and the building is expected to be finished by November 1, 1906.

The sunflower crop of Bethlehem Township, Ind., about thirty miles from Jeffersonville, amounted to about 100 tons. The seed is sold to go to St. Louis, where it is ground and becomes "condition powders" for stock or is pressed to make oil, being used as an adulterant of olive oil, it is said. The crop is worth to the farmer about \$50 per acre gross, the seed bringing about 2 cents per pound.

THE PRESSURE OF GRAIN ON BIN WALLS.

The pressure of grain on the walls of a bin was tested by Max Toltz prior to designing a large elevator at West Superior, says the Engineering Record. A bin 14 feet square and 65 feet deep was lined with sheet steel. In one of the walls near the bottom a 3x1½-foot hole was cut and in the opening a steel plate was placed, which was held rigidly at the two ends by a frame constructed of steel channels, but left the top and bottom edges free; the bin was then gradually filled with grain, carefully taking the deflection of the plate for the different heights of grain. The process of filling and emptying the bin a considerable number of items was repeated, using different thicknesses of plates, starting with No. 12 gauge and then reduced to 15, 18 and 22 gauge. Separate tests on the plates with known loads producing the same amount of deflection were made and it was found that the lateral pressure, either when filling or emptying the bin, did not exceed 3 pounds per square inch.

This result is in line with Mr. J. A. Jamieson's conclusions from experiments described by him in detail in a paper before the Canadian Society of Civil Engineers [summarized in the "American Elevator and Grain Trade" soon after]. He decided that the proportion of the weight of grain in a bin that will be carried by the walls, and by the bin bottom, and therefore the intensity of both the vertical and lateral pressures produced by the grain, is dependent on four factors, as follows:

(1) The angle of internal friction of the grain mass or the ratio of lateral to vertical pressure. Having ascertained the angle of internal friction for wheat weighing 50 pounds per cubic foot to be 28 degrees, it is readily found that the ratio of lateral to vertical pressure must be 0.6.

(2) The co-efficient of friction between the grain mass and the bin walls. As the co-efficient of friction between wheat and the bin walls built of various materials will vary from 0.375 to 0.468, 0.41667 may be taken for the mean value.

(3) The ratio of the area of the bin walls to the horizontal area or weight of the grain column, set by the dimensions of the bin to be calculated.

(4) The ratio of the diameter to the height of the grain column, set by the dimensions of the bin to be calculated. He states that the pressures produced by grain in deep bins are only a small part of the pressures that would be produced by a fluid of the same specific gravity.

A VETERAN GRAIN DEALER.

At the late convention of the Ohio Grain Dealers' Association was O. P. Cheney of Canal Winchester, who is about the oldest, if not the oldest, shipper in Ohio. Mr. Cheney does not brag about his age, but he is said to be in the neighborhood of eighty, perhaps more. He began shipping in 1852.

Mr. Cheney was born in Fairfield County, Ohio, and had his earliest business training in a dry goods store. The family removed to Lancaster while he was a young man. His father had a flour mill on the canal, and in 1851, when O. P. Cheney went to live at Canal Winchester, he followed in the footsteps of his father by building a mill of his own and establishing the business which still exists. Mr. Cheney sold his flour in Columbus from 1852 to 1863. In the latter year an elevator was put up, and Mr. Cheney began handling and shipping grain in connection with his mill. The small grain house has a capacity of 16,000 bushels. The ear corn capacity is 30,000 bushels. The elevator is an old-style house and the system of handling grain is as old style as is the house. Mr. Cheney says this fact necessitates the employment of one extra hand, but he believes the outcome is more satisfactory in the long run than would be the methods used in other more modern houses.

Mr. Cheney and his son, who still run the business, exercise considerable care in handling new

corn, and they expect to handle a good deal of it this year. "When corn is received," Mr. Cheney says, "if it is dry and in fit condition to handle, we pull a cord and dump it over alongside the sheller. If it isn't in condition, we pull another cord and dump it over to the other side." The corn crib is 124x24 feet and 25 feet high. They handle mostly local trade, but ship more or less to Cleveland and Toledo.

PRESIDENT P. B. SMITH.

The new president of the Minneapolis Chamber of Commerce, P. B. Smith, manager of the St. Anthony & Dakota Elevator Company, is another member of that large class of business men whom the West and Northwest delight to honor—a man whose own force of character and business capacity have made him what he is without adventitious supports and helps. Born on February 9, 1851, in York County, Pennsylvania, and educated in the public schools of his native county, he began life as a teacher. This was



P. B. SMITH, MINNEAPOLIS.

in 1868-69—he began early, you see; one term in Pennsylvania, then another term (1869-70) in Nebraska.

Once his system was filled with the ozone of the West, he plunged into the business world of the Northwest by going to Duluth in May, 1870—a new world then, with pretty much everything Duluth is now in the future. In August, 1870, he got into the grain business by working in the building crew that erected the first grain elevator built in Duluth. When the house was finished he remained with the operating company as elevator employe for four years, two of which he spent in various capacities, learning the business from the practical side. The last two years he was foreman of the house.

Subsequent removes were but as steps onward. In the fall of 1874 he moved to St. Paul to become superintendent of agencies for C. B. Newcomb & Co., who were buyers of grain for shipment east by way of Duluth, known in those days as "The Ice Water Route." In 1880 he went to Fargo, acting as superintendent of the Northern Pacific Elevator Co., where he remained until 1888. In September of that year he removed to Minneapolis to become manager of the St. Anthony & Dakota Elevator Co., which position he has occupied ever since.

As a member of the Minneapolis Chamber of Commerce he has always been prominent, and had served for four years as director and three as vice-president before he was advanced to the presidency in October last. He is also a director in the Washburn-Crosby Milling Co., one of the greatest milling concerns in the world.

[For the "American Elevator and Grain Trade."] LIABILITY OF BANK TAKING ASSIGNMENT OF BILL OF LADING.

BY J. L. ROSENBERGER,
A Member of the Chicago Bar.

Where a shipper of sacked meal and bran ordered by a firm made out an account therefore in favor of himself and attached the account and bill of lading for each carload to a draft, and, it was alleged, sold and delivered the same to a bank, the Supreme Court of Alabama asks, with reference to a claim by the firm against the bank for a shortage:—Did the bank, by becoming the owner of the bill of lading and the debt to accrue upon the actual or symbolical delivery of the goods to the firm, take the shipper's place? In other words, did the bank, by becoming the owner of the goods while in transit, become responsible for the performance of the shipper's contract? Or was it entirely relieved of all its burdens and entitled to have and hold the money paid to it for the goods which it never delivered?

It will scarcely be doubted, the court says (J. C. Haas & Co. vs. Citizens' Bank, 39 Southern Reporter, 129), that the bank, by becoming the owner of the bill of lading, became the owner of the goods, and the goods continued to be its property until the account assigned by the shipper to it against the firm and the draft drawn by the shipper on the firm, which also became its property, were paid and the goods delivered. Assignments of bills of lading are not governed by the commercial law. The transferee simply acquires the title of the transferor to the goods described in them.

The contract of sale between the shipper and the firm was merely an executory one (one to be performed in the future). The shipper had agreed to sell and the firm to pay for the goods upon their delivery. Before this contract was executed between these parties, the bank became the owner of the goods and of the right to receive pay for them. It undertook the performance of the executory contract by a delivery of the goods to the firm and received the money agreed to be paid by the firm upon the execution of that contract; and notwithstanding it was paid for goods which it never delivered and which it assumed to deliver, it undertook to avoid its liability by saying that because it became the owner of the draft which was paid by the firm it was a bona fide purchaser for value of the goods from the shipper, and therefore not responsible for their delivery. To so hold would be to give effect to only a part of the transaction—to ignore its ownership of the goods and the account transferred to it by the shipper.

By no rule of construction could the averments of the complaint in this case justify the conclusion that the bill of lading was held by the bank as collateral security to the draft, or that the bank was merely the shipper's agent for its collection. The cases relied upon by the bank (reported in S. Blaisdell Jr. Co. vs. Citizens' National Bank (Tex. Sup.), 75 S. W. Rep. 292, 62 L. R. A. 968; Tolerton & Stetson Co. vs. Anglo-California Bank (Iowa), 84 N. W. Rep. 930, 50 L. R. A. 777; and Schlichting vs. C. R. I. & P. R. Co. (Iowa), 96 N. W. Rep. 959, proceed upon the theory that the bill of lading was held by the bank as a security for the payment of the draft. The writers of those opinions were influenced to reach that conclusion partly upon the idea that to hold otherwise would impose a hardship upon the bank. The complaint in neither of the cases justified such a construction. And in order to sustain that conclusion the court resorted to its common knowledge of usages among banks to discount drafts and to accept a transfer of bills of lading as collateral security, instead of dealing with the transaction as laid in the complaint. In each of the cases it was necessary to sustain the conclusion reached that the unqualified ownership by the bank of the bill of

lading be gotten rid of; otherwise there was no escaping the conclusion that it was liable. To do this, notwithstanding the complaint alleged a purchase of the draft and the bill of lading by the bank, it became necessary to hold that the transaction in legal effect was a loan of money by the bank, and the transfer of the debt and bill of lading was intended as a security therefor.

There is no rule of law or of public policy against a bank becoming the absolute owner of the debt and the bill of lading for the goods or its undertaking to perform an executory contract for the sale of the goods. And no sound reason exists why it should not be required to perform its contracts as individuals are required to do. Would any court hold that if A contracted to sell B a horse, warranting its soundness, for \$100, to be paid upon its delivery, and A should assign the contract to C, and C should deliver an unsound horse to B and receive the \$100, that C would not be liable for a breach of the warranty? This court thinks not. The case in hand was not different in principle, unless the fact that the firm paid the draft, which was the property of the bank, for the purchase price of the goods differentiated it. The draft was drawn to the bank's order, accompanied by the bill of lading and the account, each of which was sold to it. The draft had not been accepted by the firm before its negotiation to the bank, and until accepted, in the absence of some fact tending to show that the bank was induced by the conduct of the firm to purchase it, they were not bound by it. When it was paid the purchase price to be paid for the goods as well as the goods themselves belonged to the bank. The firm were not parties to the transaction by which it acquired the ownership of the goods and the right to receive payment for them. And when the bank became the owner of the debt and the goods, and assumed, necessarily, the responsibility and burden of delivering them to the firm, it became the seller in fact, and must bear the burden of the transaction.

In short, the bank took the contract of the shipper, and stood in his shoes, with the same rights—no greater, no less. And the payment of the draft by the firm, which merely evidenced the price to be paid for the goods, could no more shield or protect the bank from liability than its payment would have protected the shipper had he undertaken a delivery of the goods and received the purchase price for them. It would be an anomaly to hold that the bank was protected as a purchaser of the account and bill of lading, because the firm paid the draft, which also belonged to it in right of its ownership of the goods; or that it held the bill of lading as security for a debt which belonged to it. Just how it could be the unqualified owner of the debt and only a qualified owner of the goods, when it purchased both, this court confesses its inability to see. When it purchased these papers it was bound to know the nature of the transaction between the shipper and the firm. The bill of lading and the account attached to the draft carried notice on their face that the shipper had contracted to sell the goods represented by the account and bill of lading, and to deliver them at the point of their destination.

And on the facts averred, if proven, the court entertains no doubt of the firm's right of recovery.

FUTURES NOT GAMBLING.

The Supreme Court of North Dakota has rendered a decision in favor of the complainant in the case of John Miller Company against John A. Klovstad, an action on a contract to deliver a certain quantity of wheat and which the defendant sought to avoid by pleading that the transactions between the plaintiff and defendant were merely gambling transactions. The ruling of the court was as follows:

"A contract for the sale of commodities for future delivery is valid if the parties intend that

there shall be an actual delivery of the commodities sold, but if agreed that one party shall pay the other the difference between the contract price and the market price at the dates set for the execution of the contract, it is void as a wagering or gambling contract.

"In an action on such a contract it is no defense that the vendor did not intend an actual delivery of the commodity if the other party contemplated such delivery. The test of illegality is the intention, not alone of one of the parties, but of both."

F. S. RUTHERFORD.

One of the keenest and best equipped writers whose names as authors have recently appeared under the titles of articles in the grain trade press is F. S. Rutherford of St. Louis, whose contributions to recent issues of this paper have attracted wide attention, alike for their high character as specimens of fine English composition and for their suggestiveness and practical value to grain shippers. The articles themselves bore testimony to the fact that their author had intimate knowledge of the technical conditions surrounding the grain trade and therefore com-



F. S. RUTHERFORD, ST. LOUIS.

pelled consideration at the hands of all thoughtful readers, however they may or may not agree with the writer.

Our readers, therefore, will be interested in knowing that Mr. Rutherford is correspondent and traveling agent for Daniel P. Byrne & Co., one of the oldest commission houses in the West, having been established as the Redmond Cleary Commission Co. in 1854. Mr. Rutherford is a native of Edwardsville, the county seat of Madison County, Illinois, but he early became a resident of St. Louis, and is now able to call himself, though still a young man, "one of the old-timers" in the St. Louis grain trade, his initiation therein having taken place some thirty-five years ago. He spent a few years traveling for Chicago, Milwaukee and Peoria grain firms, and was also a country grain shipper once in eastern Iowa; but about twenty years ago returned to St. Louis, where he has ever since been engaged with grain and commission firms, going with Daniel P. Byrne & Co. about six years ago.

As a writer for the press Mr. Rutherford has contributed a number of articles on commercial and transportation subjects to the daily press and trade journals. He is a close student of conditions surrounding the cash grain situation, and a large portion of his clientage among interior grain shippers have found his suggestions regarding marketing of grain quite valuable.

Mr. Rutherford considers it extremely dangerous for the country shipper to contract corn for any specified time of shipment this winter, giv-

ing as his reasons the uncertainty of securing empty cars for loading, owing to their great scarcity on all the grain carrying roads, and the contingency of bad weather and roads interfering with farmers' deliveries at shipping stations. In his opinion there will be a brisk demand at the primary markets for cash corn throughout the winter that will make consigning for sale on arrival safer and more preferable for the shipper in all respects than selling on track bids for forward delivery. He considers the car supply this winter a proposition that must engage the most serious attention of every country shipper.

[For the "American Elevator and Grain Trade."]

PREVENTION OF FIRES IN GRAIN ELEVATORS AND RECENT CHICAGO CITY ORDINANCES RELATING TO SAME.

BY E. P. ARNOLD, C. E.

It has been demonstrated by repeated trials that the standard fire hose of 2½ inches is of little use to extinguish fires in grain elevators. The ordinary man cannot handle a 2½-inch hose without danger to life and limb, and he knows it. He will not take chances. Repeated tests made with two and even three men at the nozzle with the fire pump run at one-half capacity have resulted in broken limbs and made the men afraid to handle them. Hence elevator superintendents and fire insurance engineers deemed it necessary to install 2-inch hydrants and fire hose so that the ordinary grain elevator employe would not be afraid to handle them. It has been found to be an improvement over the 2½-inch, but we find by experience that men do not like to handle even a 2-inch hose with a high pressure pump behind it.

A pressure is seldom carried on the standpipes in grain elevators. The pipes as a general thing are empty. When a fire is discovered the engineer is notified, the pump is started, pipes are filled and the building is in flames before the water can reach the hydrant to which the fire hose is attached. Pressure should be maintained on pipes at all times to make the equipment effective, but as grain elevators are not heated in cold weather the pipes would burst in frosty weather. If pressure could be maintained the year around in grain elevators, a line of pipe run along the top floor of the cupola, the machinery floor and a line through the center of the main floor, and a normal pressure kept on pipes at all times, with 25 feet of ordinary garden hose every 25 feet, every elevator head, journal tightener, boots, shovel machines, shafting, etc., could be covered by two or three streams instantly and any man or boy could handle them.

A system of double pipes could be placed as outlined above, one pipe within the other, one for water, the other a steam jacket pipe to prevent the water from freezing in cold weather. This same system is in use in all the new ammonia condensers where water runs through the center pipe and ammonia through the outer or jacket pipe. Condensers of this pattern are now in use in most breweries and cold storage plants. The expense would not be high compared with the protection gained.

Another method can also be used to retain water in standpipes in cold weather. The ordinary brine as used in breweries and in brine tanks where artificial ice is manufactured, a solution made of 5½ pounds of calcium chloride dissolved in a gallon of water, will not freeze at 50 degrees below zero Fahrenheit. Unlike salt brine it will not rust the pipes or metal supply tank. Place a metal supply tank in the cupola of the elevator above the standpipes to keep the pipes full. The head of water from the height of the tank will give a pressure sufficient for all ordinary use. Place a check valve in the pipe at the tank so that when the pump is started

and the pressure comes on the standpipes, the tank will be closed against it and water can be maintained in the pipes, always ready at a moment's notice. The expense of this system is a metal supply tank and a few drums of calcium chloride, the cost of which is less than one cent a pound. This solution will not freeze and never becomes foul.

I again call attention to the fact that when a fire starts in a grain elevator, with the present system in vogue, no water in standpipes, it will take fifteen minutes to start the pump, fill the pipes and get water to the hydrant.

Word has been received by a number of elevator owners and operators from the Chicago fire department, based on new rules and city ordinances, that all hydrants, together with fire hose and nozzles, shall be what is known as standard, or 2½-inch, and that a pressure of 50 pounds per square inch shall be the minimum pressure at the highest hydrant on the elevator cupola.

As modern elevators are about 150 feet high, the head of water as called for by the city fire department in the cupola of the grain elevator would give a pump pressure of 125 pounds per square inch. The same pressure would apply to standpipes and hose on the lower or main floor of the elevator. This pressure would burst all ordinary fire hose on the first floor, and even if trained firemen were at hand with a fire hose of sufficient strength to withstand this pressure, there is not a man on the force of the Chicago fire department who could handle it; and as the men of the Chicago fire department are instructed not to go into a burning grain elevator, of what use will the standard equipment be?

To be of any use under the new rules two separate pumps and separate standpipes would have to be installed—one for use in the cupola of the elevator, to carry a pressure of pump of 125 pounds per square inch to give a pressure of 50 pounds at hydrant in cupola, the other for the use of floors below to carry a pressure of 50 pounds per square inch. To change the existing conditions to comply with the new city regulations will mean a large expense incurred by the elevator owners with less protection from this source than they now have with the 2-inch connections.

The old adage, "An ounce of prevention is better than a pound of cure," will aptly apply to fires in grain elevators. Watchfulness and the man who oils the machinery on the shaft on the top floor of the cupola to remain on this floor at all times when machinery is running, to be on hand to put out a fire with a pail of water or a fire extinguisher in the start, is worth more than all the standard equipment. (Had a man been on the machinery floor at the Santa Fe Elevator that fire would have been prevented.) This will apply with greater force in elevators where friction heads are in use.

Barrels of water and pails should be distributed throughout the plant, with a few fire extinguishers to reach high places where a pail of water cannot reach, such as elevator heads, shafting, belt tighteners, rope drive idlers, etc. (How many men can throw a pail of water and hit a mark ten feet above where they stand? Fire has to be fought from below.)

Fire extinguishers for use in grain elevators should be of the non-freezable type. The calcium chloride solution, with 5 pounds of calcium chloride to each gallon of water, with a constant air pressure, is instantly ready for use even at a temperature of 40 degrees below zero. Acid machines or extinguishers are of no use in winter unless removed to a warmer place than a grain elevator. An acid machine cannot be depended on except it be refilled about every eight months, as the soda cakes in from eight months to a year; so all chemical or acid and soda fire extinguishers should have a tag with date when

last filled, so it can be seen if they are in condition for use. Again, the acid extinguisher has an element of danger not possessed by the pneumatic or air pressure machine, as when the acid bottle is broken and combines with the soda the pressure comes suddenly and sometimes bursts the shell, as a number of firemen and others who have been injured by the acid extinguishers can testify. Men who understand them avoid and will not use them. This does not apply to the air pressure, non-freezable. It has a constant pressure and is perfectly safe.

The automatic journal alarm, where properly installed and in adjustment, is a factor in preventing elevator fires; but the thermostats must be kept in the journals to the full depth of at least half an inch and the electrical device kept in order. If this is not done it gives a false security, and a plant equipped with the automatic journal alarm would be far more safe without it; in fact, it makes the plant positively dangerous.

The careless oiler who has a journal that is liable to run hot, but does not want the foreman to know it if he neglects it, removes the thermostat so it will not ring in an alarm. Few inspections of plants equipped with the journal alarm system are made that do not show some thermostat removed from the journal, and in most cases they are the most dangerous journals. This system could and should be improved upon so that it would register when a thermostat is not in place.

The journals of elevator boots should be oiled direct, where practicable, as in cold weather oil run through the quarter-inch tubes from the main floor to the journal in the boot freezes up. In some instances the oiler, to thaw out the tubes, which are about 10 feet long, heats a long wire and forces it down the tube to the journal so as to get oil to the journal. The red hot wire, being carried through the elevator and plunged into oil, is a hazard and its use should be discontinued. Then, again, in cold weather oil will not go through the tube a minute after the hot iron is withdrawn, and a hot journal would not melt oil in a tube three inches above the box, so that boot journals oiled through tubes are apt to run without oil in cold weather.

All electrical cut-out and fuse boxes should be lined with asbestos and have spring hinges or other self-closing devices, so that sparks cannot fall into the dust on the floors. Incandescent electric lights should not be placed in basements or in out-of-the-way places where dust will accumulate around globes and cover them up, or a fire from this cause will result. Electric motors should be placed in a room that is sheathed with metal and the floor under the motor should be of non-combustible material, as the floor under the motors becomes soaked with oil and sparks from the commutator are apt to set fire to the oil and the dust on the floor. Electric light wires and extensions should not be hung on nails driven into woodwork, as insulation becomes brittle with age and allows a leakage of the current, and with moisture will form an arc on the nail or piece of iron and set fire to the woodwork at that point. Steam pipes, staples, iron rods or other conducting substances are also apt to short-circuit and cause fire.

Grain bleachers—the old style bleacher—are generally constructed of wood. A box 4x4 feet inside and about 40 feet high is placed near enough to the elevator to allow the oats or barley to be spouted to the top of the bleacher. A sulphur burning furnace is set near the bleacher and connected to it by a metal pipe opening about 10 feet above the base of the bleacher. A coal fire is made in the furnace and brimstone burned on the coals. The heat from furnace carries the fumes into the grain to be bleached.

The more modern bleacher is of brick; is sometimes cribbed with 2x4's spiked planks inside;

is set at least 25 feet distant from the elevator; connected to cupola of same by a metal pipe with an automatic drop valve in top and bottom of the spout (a screw conveyor in a metal box is sometimes substituted for the spout). The furnace is of large area and about 4 feet high, constructed of cement and firebrick. It is set 25 feet away from the bleacher and connected to the same by a metal pipe or a brick flue.

The grain men do not as yet fully understand the art of bleaching or of burning sulphur and brimstone. I think a number of them will be better posted later on. The men who do understand the art are the straw and linen bleachers. The men who bleach glue also are good chemists. They know (and the elevator man ought to know) that sulphur flour burns for 25 feet, in other words, the fumes are not all converted into sulphur gas until they have traveled that distance from the furnace, and all the sulphur that is not burned is wasted. They also know that the fumes should not go into the bleacher too hot, to get the best results; hence they never use a small metal pipe, but construct a brick flue of equal area to the grate surface of the furnace. They have a large grate surface in the furnace, as it is found that one gets no more fumes from sulphur a foot deep on the fire than one would with an inch. They have the flue enter the bleacher high up, as sulphur fumes are heavier than air and drop. The grain men try to raise the fumes with a steam jet or a fan.

From the above it is seen that better results are obtained with the furnace 25 feet away, and then protection from fire is assured.

Grain driers should be set at least 25 feet away from the elevator and, properly, should be cut off by metal valves in metal spouts, and should communicate with elevator, if at all, by belt conveyors with automatic iron slides with fusible links in the hopper of the drier. They should also be equipped with an automatic thermometer with register on first floor of the drier and with thermostat located in the drying compartments. They should also have an outside iron stairway to the drying and cooling compartments, so that they can be kept clean and be of easy access for inspection. If equipped as above, better results in drying grain and protection from fire would be obtained.

The sprinkler system, if properly installed in grain elevators, is a factor for prevention of fires, but there is room for improvement. A fire engineer remarked about a year ago that as at present installed, with tanks erected on wooden supports in a frame cupola, tanks would fall and wreck the system in twenty minutes after a fire had reached the cupola. Sprinkler men laughed at him. Some time after we had a fire in a sprinkled elevator (the Cedar Rapids Elevator) and the tank came down as he stated it would, and the elevator was destroyed. Tanks should be supported on brickwork built from the ground up. In other plants covering a large area we find a sprinkler system's "unlimited supply" of water a 1,000-gallon pump with a 4-inch discharge to system. Question: How much water can a 1,000-gallon per minute pump discharge through a 4-inch pipe?

We also find grain elevators with pump, standpipes, hydrants, etc., with a capacity of 500 gallons or more, connected to the city water mains 15 miles from the pumping stations. Water is taken off the main the entire distance by manufacturing plants so that at the end of the line there is practically no water in the mains.

Extreme congestion of traffic particularly east of Buffalo is thought by Chicago shippers to endanger the grain export trade. Vessel room is scarce, and with the rail situation as it is shippers are having a good deal of difficulty in getting grain moved rapidly enough to meet obligations.

METAMORA ELEVATOR COMPANY.

It needs but a glance at the picture of the Metamora Elevator Company's buildings to see that the company does a considerable business in addition to buying grain, seeds and hay. In the two-story portion of the building, therefore, one finds facilities for storing and handling flour and feed and salt, which are supplied to their farmer patrons, as are also lime, cement and coal.

The elevator proper is a cribbed structure, 36x36 feet on the ground and 75 feet high, giving a stor-



SAMUEL L. RICE, METAMORA, MICH.

age capacity of 25,000 bushels. The warehouse is 26x40 feet on the ground, two stories high. Both buildings are sheeted with iron from the Garry Iron and Steel Company. There are also hay sheds, giving room for storing ten cars of hay, built in 1903.

The equipment is about as follows: Fairbanks-Morse 18-horsepower Gasoline Engine, Howe Wagon and Howe Hopper and Warehouse Scales, Clipper Cleaner of 350 bushels' hourly capacity, Invincible Oat Clipper, Western Corn Sheller of 500 bushels' hourly capacity, and a full line of elevator and conveying machinery by the Stephens-Adamson Manufacturing Company.

The elevator was designed by F. C. Baluss, formerly manager of the Baluss-Dawson Company of Blissfield, Mich., but who is now chief engineer for track elevation in Chicago of the Chicago & Northwestern Ry.

The Metamora Elevator Company is managed by Samuel L. Rice, who holds the position of secretary as well as general manager, having succeeded F. C. Baluss. Mr. Rice was born on a farm located about two miles from the elevator, and having worked his way through the public schools of Blissfield, Mich., taught a country school for two years before he became an employe of the Baluss-Dawson Company, where he was prepared for his present position under the personal direction of Mr. Baluss. When he went into the grain business it was with the intention of mastering its intricacies, and he is now neither too old nor too young to learn, but is accumulating practical working knowledge of it as his experience accumulates. He is also interested as stockholder in the Pioneer Elevator Co. of Pioneer, Ohio.

Mr. Rice has the one advantage few of his contemporaries in similar positions enjoy, to wit, he was secretary of the Lenawee County (Mich.) Grange for one year, and is at present the only grain man in his state holding the office of Master of Grange.

John Dorsey, One Hundred and Eighth Street and Hoxie Avenue, South Chicago, fell the other day from the top of the Irondale Elevator 105

feet into the Calumet River. Aside from the wetting, Dorsey said he suffered no ill effects from his fall. A few weeks ago, when Dorsey was painting a chimney, the platform on which he was standing broke and he fell 50 feet, but escaped uninjured. "Three strikes is out?"

[For the "American Elevator and Grain Trade."]

STATE WEIGHING IN MISSOURI.

BY A ST. LOUIS RECEIVER.

As in Kansas City, St. Louis is now indulging in the luxury of a double charge for weighing on all grain shipped into or out of here. The Missouri Railroad and Warehouse Commission on October 16 last assumed control of the weighing of all grain and hay shipped into or out of St. Louis. The state had but partially performed the duty of weighmaster prior to that time, when, pursuant to a decision of the city counselor that weighmasters' licenses issued by the collector of the city of St. Louis are illegal, being in conflict with state laws, weighing of grain and hay on wagon scales was also assumed by state deputy weighmasters.

Appointees of the Railroad and Warehouse Commission are now weighing at all points in St. Louis, and so are the supervisors appointed by the Merchants' Exchange still on deck, thus saddling two sets of weighing fees on the business handled here. The question arises, Who will pay the extra weighing fee? It is an additional tax that will hardly be tolerated by the shipper to this market, and it seems unfair that the burden should be borne by the receiver. Some of the receivers have paid both the state and Merchants' Exchange weighing fees, while others have declined to pay more than one. But those who persist in refusing to pay for services rendered by the state of Missouri are likely to find a collector with strong backing at their door some day. It would seem that this controversy must end in the withdrawal of the Merchants' Exchange Weighing Bureau, for that institution, conflicting with state weighing, must have the same illegal status as would the Merchants' Exchange's own grain inspectors, or an oil merchant's own oil

fully equal to the occasion in that it lacked authority to enforce compliance with its plans. Where it has had a supervisor stationed, it was by the grace of the manager of the plant. The Merchants' Exchange Bureau has not had supervisors at all places where grain and hay are weighed. And here is the benefit to the grain and hay trade of St. Louis in having so high authority as the state in charge of the weighing. The state does not need to pray for the privilege of placing a weigher in charge that correct weights may be guaranteed to the shipper sending grain or hay to market. In the majesty of her right, and in the name of justice, she places her weighers where there may be use for them; and being placed there, they are able to assert their authority.

Not long ago at a certain plant in this state, a state weighmaster detected irregularities about the scales that weighed wheat short; and the fact being reported, one of the concern very forcibly warned the state weighmaster to thereafter keep his hands off the scales. Well, he did not keep his hands off the scales, but rather redoubled his vigilance. What would—what could—a Merchants' Exchange supervisor without authority have done under such circumstances?

Not taking from the Merchants' Exchange Weighing Bureau one iota of the very great credit due for its excellent work, it is well to bear in mind that the work of the Bureau is the creation of enterprising and vigilant members of the Exchange; that it was through their co-operation that the Bureau has been made a success. And such being the case, can not these same vigilant spirits of the Merchants' Exchange co-operate to even better advantage with the Missouri Railroad and Warehouse Commission in their efforts to secure correct weights?

The state weigher, most emphatically, is not a political appointee. He is personally known to the Exchange members; is appointed by reason of his intelligence, experience and ability as a weigher and elevator man; he is a man of good character, able to furnish a bond of \$5,000 as guarantee of faithful performance of duty. He is not waiting



BUILDINGS OF THE METAMORA ELEVATOR CO., METAMORA, MICH.

inspector, usurping the duties of the regular appointees of the state.

While the members naturally revolted at the interference of state officials in a matter that has engaged the best efforts of the Exchange to improve and bring near to perfection a supervision of weighing that has given St. Louis an unexcelled reputation for good weights, they are free to admit that what the state decrees, that must they submit to.

The Merchants' Exchange Weighing Bureau has, without question, accomplished immeasurable good for the St. Louis market by vastly improving the weights situation. Yet, the Bureau has not been

on favor, but, acting with authority and a disinterested regard for duty and honesty, is in a position to absolutely protect the shipper. And this being so, he is entitled to the unbounded confidence and good-will of those whose interests he serves.

Another point, and an exceeding strong one, is that, with the Railroad and Warehouse Commission in charge of weighing, a shipment of grain or hay consigned to St. Louis is actually in the possession and control of either the railroad company or the state of Missouri from the time it is receipted for by the agent at the shipping point until it is unloaded at St. Louis; this surely is a guarantee of protection that the shipper must appreciate.

PERFECTION GRAIN DRIER.

Of the practical value of the grain drier there is no longer any question, and its use is rapidly passing from the terminal or transfer elevators only to the larger exclusively shipping houses also. It is, therefore, only a question of kind and adaptability to a given location or condition and the price.

In introducing the Perfection Grain Drier to the trade, the Weller Manufacturing Co., Chicago, the sole manufacturers, feel that they are recommending to a trade which has known them in other lines for many years a drier that is simple, economical, effective and safe from an insurance point of view.

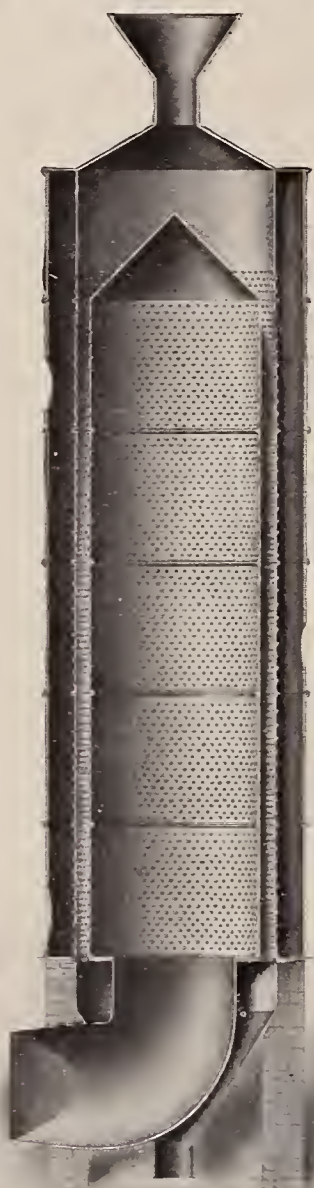
Machine consists of a drying cylinder, a cooling

machine can be operated either as a charge drier or as a continuous machine. Operating as a charge machine, the drying cylinder is filled with grain, the warm air forced through it till sufficiently dry, then it is put into the cooler and treated with cold air, while another charge is going through the drier. The better method, however, is to run the machine as a continuous drier by having a constant stream of grain passing through it, which can be regulated at the outlet or in the hopper below the machine. By this method one can readily see that more work can be done in a given time.

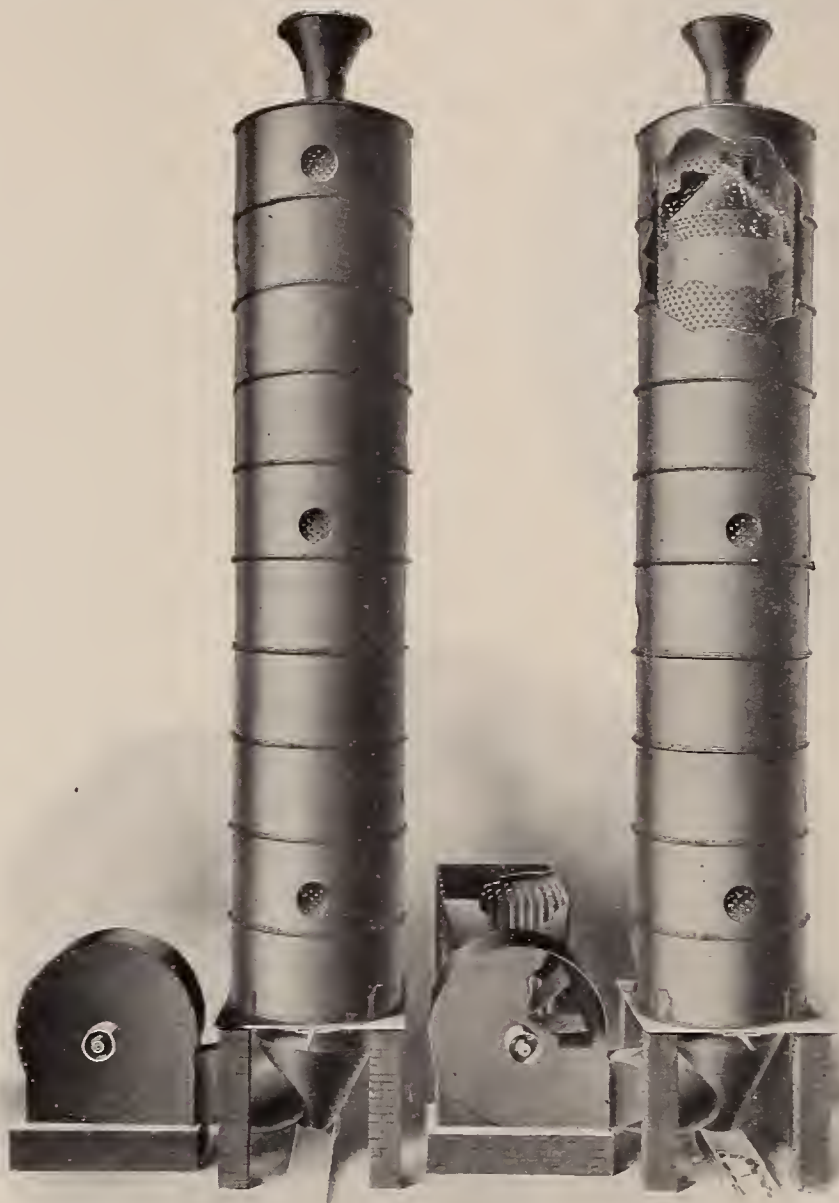
Machines are built of any desired capacity from 200 to 500 bushels per hour, and will dry grain, peas, beans, rice and such like. The illustrations show that it is simple, easy of erection and requires

The trial ended on the second day with a verdict of guilty, the penalty attached being confinement in the penitentiary for five years. A motion for a new trial was made and was overruled, and on October 29 he was duly sentenced. After the sentence was passed an appeal affidavit was filed and allowed, the appeal bond being \$7,500. It is expected that it will be a year before the Superior Court will pass on the case. Mr. Harroun will be at liberty on his bond and able to continue the management of his business as heretofore.

Mr. Harroun was arrested on this charge on Sept. 15, 1904, and released on a \$15,000 bond. Subsequently a settlement was made with his creditors, to whom he owed \$890,000, the basis being an immediate cash payment of 30 per cent and the



SECTIONAL VIEW.



THE PERFECTION GRAIN DRIER—AS ERECTED.

cylinder, a steam coil, and a double or two single fans. The drying and cooling cylinders are of the same construction, being made with three chambers. The inner chamber is connected directly with the fan and is for the admission of dry warm air into the drying cylinder, or of cool air from the fan into the cooling cylinder. This inner chamber, or cylinder, is constructed of a specially designed perforated steel, which, while it admits of free circulation of air, is such that it does not offer an outlet for the grain. The second cylinder is eight inches larger in diameter than the inner, leaving a chamber four inches wide for the grain. It is constructed of the same material as the inner one, admitting free circulation of air through the walls of the inner cylinder, through the four-inch column of grain and through the walls of the second cylinder into the outer chamber, which is a cylinder sixteen inches larger in diameter than the second and made of solid galvanized steel with staggered outlets from bottom to top, allowing the air to escape after it has done its work.

In the base plate upon which the cylinders rest is a valve to control the outlet of the grain from the grain space.

It will be seen by the above description that this

but little room or boiler capacity. These and any other details, however, will be supplied on application to the manufacturers.

W. H. HARROUN FOUND GUILTY.

W. H. Harroun of St. Joseph, Mo., a well-known grain operator and elevator owner, was put on his trial at St. Joseph on October 23 on a charge of forging bills of lading. Every expedient of technical delay had been exhausted before Mr. Harroun's attorneys consented to his trial on one of several actions against him.

The testimony obtained in the trial does not change the general charge made against Mr. Harroun about a year ago and then substantially admitted by him to be true, that he had forged C., B. & Q. bills of lading and obtained loans upon them to a very large amount. Judge O. M. Spencer, general solicitor at St. Joseph for the Burlington System, said Mr. Harroun had confessed to him that he had uttered the forged bills, the signatures of which were indistinguishable from the genuine. Mr. Harroun had also exonerated all other persons, no one but himself, he said, having been concerned in the fraudulent transactions.

giving of notes for the remainder, due in five years. On October 26, 1904, he resumed business.

The operations of Mr. Harroun conducted on the basis of the fraudulent bills and the loans obtained on them covered quite a long period of time—two years, perhaps. He was very methodical, and kept a record of all such documents outstanding, which he protected by new forgeries as the papers came due at his bankers; and but for the precautionary inquiries of an extra careful New York banker, to whom some of the bills were offered on an application for a loan, he might have avoided detection for a still longer period. When asked if his brother, A. L. Harroun, and sister knew of his peculations, he said his own secretary did not have an inkling of what was being done.

"His system was certainly a marvel of perfection," said Judge Elisha Robinson of Kansas City, who represented local banks at the meeting of Harroun's creditors. "I heard it said that he did not float his forged bills of lading with the grain companies because he did not want to rob any of his associates in the grain business. That report was without foundation. He could not float his bogus paper with the grain firms because they would ascertain that fact within two or three days. With

the banks it was different. For instance, he would secure money from a Kansas City bank on a bill of lading for grain to be delivered in Toledo. This grain could not possibly reach there within less than two weeks. By a system of bookkeeping he kept account of his different deals, and just prior to the delivery time of this shipment he would borrow another large sum from either that same bank or another institution on bills of lading to Buffalo, Detroit or some other distant city. In his way he kept a continuous chain of paper floating for a period of eighteen months, the crash not coming until he was forced to a showdown."

[For the "American Elevator and Grain Trade."]

PRACTICAL POINTS OF ELEVATOR CONSTRUCTION.

BY AN OBSERVER.

I will try to give a clear idea of some of the important good points of plans and construction which have come from an inspection of many elevators in all parts of the country. Of course, plans which are adapted to make a good building in one section of the grain country would not apply entirely to another section. For instance, what would be needed in an exclusively corn country of Illinois or Indiana, where farmers do not do shelling, but deliver corn in the ear, would not be applicable to a section growing all small grain. Nevertheless, buildings in both locations are elevators and are built to handle grain. Many general principles, however, apply to both. The following has special reference to a building in the West to handle shelled corn and small grain.

First, let the foundation be more than strong enough for what you expect the building to carry. No telling when you may have a bumper crop and few cars for months at a time, as is the case this year.

The building in mind has a heavy wall all around and cross walls every ten feet, so that the bases of these walls nearly meet. The cribbing starts from the foundation, except one-third ground floor space, which is open for scales, passages, etc. If the drive is under the bins, as it is in this building, don't make the error I saw in an Indiana elevator which collapsed a couple of years ago, of starting the cribbing from the foundation for outside walls. Heavy timbers must support this outside bin wall.

The drive contains dump scales, which are controlled by a friction break, so as not to drop the wagon so hard as to break the frame or scare the team. The size of the pit to receive the grain is a most important point in facilitating the handling of grain at rush times, when farmers are hauling from the thrasher. They want to unload quickly and get away. They do not want to wait for grain to be elevated, according to the slow old way, and will not do so when your neighbor has an elevator where it is unnecessary to wait. This pit has a capacity of three large loads, which is ample. Many do not accommodate one load. Of course, where driveways are high pits are much larger.

The boot is twelve feet below the floor. This secures a larger angle for the hopper of pit and more room as well. The hopper is covered with heavy iron. This lets the grain slide with much more ease and prevents danger of clogging. The boot is placed in a large steel tank with flaring sides. It has plenty of room for a man to get into it and clean it out, so as to save the grain that is spilled or dug out when a choke-up occurs. This boot is a Hall Non-chokable one. They are rather expensive, but if they save a fire, or even many delays, they are certainly a good investment. The owner of this elevator says that they keep just as close watch of the feed as ever and probably do not give it a thorough test; but it is there to do the work in case conditions arise to need it.

The back pit is constructed in a manner seldom seen, but certainly is important. It is entirely boxed in tight, clear up to the floor. The bottom is iron-lined and all spouts leading to it are tight.

This disposes of the large amount of dust always found in a small, low, inaccessible basement with open spouts leading to the back leg. This back leg is rarely cleaned out, but the expense of the work is not more than a few dollars.

The cups of the elevator are 12-inch, at least a third larger than is usually found.

The power, located in the rear of the elevator, with drives overhead, across the driveway instead of under the floor, as is usual. This arrangement has the advantage of having the machinery in view at all times, easy to get at the oil bearings or tighten belts when necessary. A sprocket chain to the cupola drives the elevator.

A large size Clipper Cleaner is on the first floor. This is driven from the main shaft. A hopper scale is also located on the first floor. Here is what I consider one of the most important features. There are spouts from every one of the fifteen bins leading into this hopper scale. The advantage is self-evident. The large number of bins for the size of the building, 30x30, makes it possible to keep different grades of grain in separate bins. Then they can be mixed as desired. It is necessary to elevate it to get grain into the car, but this is nothing compared to the profit derived from the mixing process. Then with all the spouts in view one can keep close watch of the amount of grain coming from each bin, so as to keep the grade even throughout. If desired grain can be weighed and elevated into the shipping bin. A garner bin is above this which enables the loading to be done without interruption. These spouts from bins that are not directly over the first floor simply top the sides. They can only be used when these bins have grain above the point where entrance is made.

Spouts from six bins are arranged to discharge grain into the cleaner. The dust spout was constructed by a millwright. It is tight and solid and does not let half the dust blow out of cracks to litter up the building.

There is a good deal of controversy over the question whether or not it pays to go to the expense of having a cleaner in an elevator in this Western country. There are, no doubt, arguments on both sides, and different people have had different experiences with and without them. As a matter of fact, very few are found in this section, and many are standing idle—not used for years. But after all is said, it seems to me that there are years when the grain is in such condition that a cleaner will pay for itself many times over. In shipping to some markets the extra work will be worth the outlay. In other markets there would be no advantage. Of course, if a man always ships to one place and is not on the lookout for markets where special conditions make better prices, why then, no doubt, this grain man, not knowing how much he might better himself, is just as well off without a cleaner; but the up-to-date, progressive and aggressive man, who makes a close study of the whole grain business, who spends a little time and money to take and who reads the grain trade journals, would not be without this quite necessary part of an elevator equipment, and simply because he wants to be ready to take advantage of conditions that may arise at any time in order to make the most out of his business. Certainly the large grain companies would not have cleaning houses where all grain from country stations is unloaded and cleaned and reloaded unless it is a financially profitable success.

To proceed with the description of this model elevator: A passenger elevator takes one to the top. The bin floor is covered with a tight floor to confine the dust and save a possible fall of an employe. The cupola is high and has two floors. This gives a good distribution of grain to all bins and to a lower addition which adjoins the elevator on one side. A Hall Distributor is installed. With this the connection of a spout from the head with the various spouts to the bins is a tight joint. This does away with the great fog of dust otherwise always present. It saves an accumulation of

grain and dust around the various spouts, and also the waste caused by mixing grain of different kinds to different bins. The turnhead is controlled from the first floor. The whole is so well constructed that there is no reasonable danger of the spout being set to discharge anywhere but into the desired bin. If a bin becomes full and the grain backs up into the spout the overflow is carried to the first floor and into the elevating leg. This gives notice without going to the top of the building.

Another simple and efficient home-made device to show the amount of grain in the bins is installed. Suspended over the center of each bin by a rope running over a small pulley is a short piece of 2x4 timber. These ropes are assembled in a row on the leg. Each has a loop numbered according to the number of bin over which it hangs. With the 2x4 placed on a level with the top of the bin, to find out how much grain is in a bin, it is only necessary to let it drop until it touches the grain and note how far a loop in the rope has risen.

Ropes also are arranged to lift the sash of the windows in the cupola to allow air circulation to carry out the dust. These are controlled from the first floor. As a still further elimination of dust, we find a 30-inch suction fan in the cupola connected with the head where grain is discharged. All of these means to remove dust in the cupola are commendable and are certainly effective. The floor is just as clean as that in the office and rarely needs the use of a broom to keep it so.

The head is hopped to the down leg at an angle of over 45 degrees, and contains an iron pulley which runs free a couple of inches on each side of the head. All spouts to bins are lined with heavy iron.

The bearings of the shaft carrying the head pulley are attached to the sides of the head only. They are adjustable, up or down, in a slot and controlled by a screw so as to easily keep the pulley free and the belt running wholly on the pulley. The whole leg stands free from the elevator, and any settling of the building from shrinking of cribbing and from being heavily loaded will not affect the running of the elevator or the perpendicularity of the leg.

In a great many elevators not a little power is wasted, as well as time, by the improper construction of the discharge spout from the head. It is often found starting as high up as the center of the head pulley. Then, unless this pulley is a large one and runs too slowly, it will carry a large quantity of grain over and down the back leg to be re-elevated. The distributing spout and throat piece should not be above the level of the bottom of the head pulley. Then let the pulley be of a good, generous size, so as not to turn the cups over too quickly, and there will be no trouble of this kind.

All bearings are oscillating and ring oilers. They are expensive compared with the common ones, but there is not half the danger of their giving any trouble. They adjust themselves to any slight variation of supports and save a great deal of oil.

All oil holes are fitted with cups that are tight. Unless one has observed the usual conditions in elevators, it will be hard to appreciate the feeling of satisfaction, security and almost beauty in this small point of construction. An ordinary open box fills up with dust, oil is poured on, maybe a little gets to the shaft and maybe none does, but there is no question about a lot of it getting on the outside this, it is a great source of danger of fire. floor beneath. Additional dust clings to this, and so on, layer after layer, until it is next to impossible to get the bearing properly oiled. Besides this, it is a good source of danger of fire. This accumulation is very inflammable and causes a rapid spread of fire if started by a slightly overheated box. Yet, when a fire starts from this condition the owner can think of no apparent cause. Without oil on the outside no dust will cling and

none can work into the box. A large part of the fire hazard is removed, and there is evidence of of care and cleanliness. Any insurance company will appreciate this and give the owner credit for it.

It might be added that this building contains several barrels of salt water distributed throughout, handily located, and a bucket for fire use only is with each. This is certain evidence that the building is insured in a special elevator mutual company. It seems to be their business to improve the physical conditions of elevators and eliminate all possible hazards and also to require special precautions to be taken, as it is their aim to reduce the cost of insurance by reducing the number of losses by fire. In fact, these points all have a direct bearing on the cost in these companies. If they can save a man a fire by requiring him to accept their large and more comprehensive knowledge of the causes of elevator fires, so that he will be free from at least part of the causes of fires, it is worth more to the elevator owner than the saving they make in premiums. For, in case of fire, if he collects all his insurance, his loss in property and in business is always heavy.

Another point these insurance companies require, and for which credit is given, is the location of the gasoline tank. In this case it is twenty feet away from the elevator, or drive, and underground. A dynamo sparker makes the ignition spark, so that there is no use for any gasoline in any of the buildings or its additions.

Stoves have brick chimneys with pipes securely wired and all wood within three feet of them is covered with iron.

Some may think other points of construction more vital than those mentioned above, but certainly they are all important and go to make up a first-class handy plant to handle grain to advantage and cheaply.

JOE PLEADS GAMBLING.

It will be with regret that the many grain men who in 1898 were ready to vote Joe Leiter, the bull, a public benefactor and to take up a collection to pay some of his losses on grain, heard that in a recent lawsuit in New York he made as his defense against a note given for margins the plea of gambling. It wasn't worthy of a great hero. Joe in 1898 was a grain merchant. His father, who was putting up the money to prove it, said he was, and surely he ought to have known.

But in New York Mr. Leiter was sued on a note for \$52,021.97, which, with interest, amounted to \$69,767. The note was made out to the Allen, Greer & Zeller Company, a firm started in 1898 to deal in options on wheat.

Mr. Leiter's defense was that under the laws of Illinois this transaction came within the definition of gambling, and that the amount of the note was, therefore, irrecoverable. But the court, nevertheless, gave judgment against Mr. Leiter.

During the course of the trial, Mr. Leiter confessed to selling 100,000,000 calls and 16,000,000 puts and to holding at one time calls on 98,000,000 bushels of wheat. His room in the Grand Pacific Hotel, where he and his associates took their luncheon, was furnished with tickers and telephones and he ate with a receiver to his ear. "At one time that summer," he said, "we controlled most of the visible supply of wheat."

"Was there any intention that the wheat called for in these contracts should be delivered to you?" "Not if I could help it."

His counsel questioned the legality of the claim upon the note, asserting that it was the outcome of gambling transactions; that he gave the note to his brokers believing he owed them that amount, but that he had been deceived, the entries in the books of the firm being falsified and not containing many items with which he should have been credited, the aggregate of which far exceeded the amount of his indebtedness; that "puts" and "calls" or options in wheat were nothing less than wagers

and that no recovery could be had, therefore, upon the note. Judge Greenbaum declined to dismiss the complaint on this theory. Mr. Leiter gave notice of appeal from Justice Greenbaum's decision.

A RECORD OF FIFTY YEARS.

In the West, where often fifty years would cover the entire historical record of many towns, a business career covering half a century is a rarity. In the East, less so; nevertheless so long a period of continuous activity is a record that may be claimed by few business houses, even those descending in the course of nature from father to son.

The business of J. & T. Adikes at Jamaica, Long Island (Queens Borough, New York City), was founded by their father, Henry Adikes, who on going to Jamaica opened a small retail grocery on Division Street, near the present depot of the Long Island Railroad. Out of this modest start has grown the present business, which includes a store on the original site, a large retail store on Fulton Street, a grain elevator and feed mill, a

portions. In fact, so far as can be remembered, these cars loaded with seed potatoes, coming through from many points and billed to Jamaica, constituted the first important "foreign" business the Long Island Railroad had and were practically the beginnings of to-day's considerable traffic.

Naturally men of such business capacity are also conspicuous in local affairs, and both brothers are prominent in the Citizens' Association, John Adikes being second vice-president of that body.

NEBRASKA GRAIN MEN'S DEFENSE.

The attorney-general of Nebraska tells the newspaper reporters that he is unable to discover that the temporary injunction against the Nebraska Grain Dealers' Association has been violated, although he has agents, or correspondents, in every county in the state. He says:

"The farmers are receiving an average of 2 cents nearer the Chicago prices for their grain. In no instance have the grain men who were formerly members of the Association agreed for the control of prices, and no rate cards have been sent out.



WAREHOUSES AND ELEVATOR OF J. & T. ADIKES. JAMAICA, L. I.

seed potato warehouse, a hay warehouse, and the only wholesale grocery establishment of Long Island outside of Brooklyn, with a branch at Flushing.

The grain elevator, which occupies a very considerable part of the building shown in the illustration, is one of the features of the Jamaica landscape. It was erected in 1900 and has storage capacity for 40,000 bushels of grain. The same roof covers a hay warehouse 45x90 feet in size, and a grocery storehouse 40x90 feet, and four stories high, and space for the transaction of the firm's wholesale business, which covers the entire island, east of Brooklyn. The building is located on the old "Jamaica Plank Road," a highway used by the farmers of Long Island, who one day drive with their produce into the city and on the next return to Jamaica and purchase their hay, grain and other supplies, and thus save a long haul from Brooklyn. The Flushing branch does the same service to the farmers who patronize the Harlem market. The Jamaica warehouse and elevator has its own spur from the Long Island Railroad for the delivery of grain, hay, etc., without carting.

The present firm succeeded their father in 1876, and began expanding soon after. The first move was the enlargement of one of their stores. Then (1880) a seed potato warehouse of 250,000 bushels' capacity was established to supply Long Island farmers with seed potatoes from Maine and Michigan, a business that has grown to immense proportions.

The Association has gone out of business, even to the extent of withholding the salary of the secretary. With this machinery of the Association out of working order there is but little chance of any secret arrangement for the control of prices, since the dealers charged with entering into arrangements for the control of the rates operated exclusively through the state organization."

The Omaha Elevator Co. on October 14 filed its brief in the Supreme Court in defense of the proceeding against the company. It is argued that all the laws enacted against the grain trade are unconstitutional, including the implied repeal of the act of 1887 by the act of 1905. Discussing the laws passed up to the 1905 law the brief says:

The law of 1889 is invalid, for the reason that the bill as introduced and as voted upon, as shown by the title, applied only to "manufacturers." It is true that a bill with a title affecting manufacturers "and dealers" was engrossed and signed, but the title to the bill when voted upon did not have the "and dealers" in it.

The act of 1893 does not purport to affect grain men.

The first act of 1897 is invalid for the reason that the bill as engrossed and signed was never voted upon. The title of the act engrossed and signed affected "trade and business." But the bill as introduced and voted upon did not contain the words "and business" in the title. This is a very material alteration, as "business" refers to insurance companies, professions, and probably a hundred occupations not embraced by the term of "trade."

The second act of 1897 is invalid. A bill was introduced under a title "a bill for an act to pro-

hibit combinations among grain elevator men, and to provide a penalty therefor." This we will call the short title bill. The committee to which it was referred attempted to substitute for it a bill with a title as long as the moral law, the latter being in every sense a different bill. The result was that the short-titled bill was voted upon, but the long-title bill was engrossed and signed, and hence neither became a law.

This leaves for consideration only the act of 1887 and the act of 1905. And the question is, which one of them governs this case? I confess the matter is not free from doubt. I will also say that in behalf of my clients I do not know that I care which one is the one. But while admitting there is a doubt, I insist the correct rule to apply will be to hold the former law is repealed by implication.

The brief also argues that the 1887 law is a general law and was repealed by implication by the 1905 act. Therefore the case must come to trial under the 1905 act, and acts committed prior to the passage of that law can not be considered and an injunction in this case will not lie. If the old law is not repealed, then the new law is not in effect as against grain men. In such event the rebate paragraph, provided only by the new law, should be stricken out of the petition, for there is no law upon which to base it, and the injunction should be dissolved.

THE SUPERIOR-DULUTH INSPECTION ROW.

The war of the Duluth Board of Trade on Wisconsin inspection and weighing of grain at Superior goes on with increasing bitterness. Nevertheless the Wisconsin inspectors are doing business, although, to judge from the local newspapers on both sides the bay, both weighers and inspectors must needs be of the "husky" sort.

One of the many episodes of the past thirty days was the shutting down of the Listman Mill, apparently as a result of the controversy, on the ground, as a mill official put it, that, "We cannot allow a Wisconsin official to weigh our grain. If we did we would not be able to purchase a bushel in Duluth or from members of the Duluth Board of Trade. We must have all the weighing done by Minnesota officials if we get wheat at all." The Wisconsin weighers were in possession of the scales, hence the stoppage. Later the mill made an arrangement to have the grain weighed at Duluth and then reshipped to the mill at Superior. The Daisy Mill also went through the same performance later.

Then the mills and the roads got into difficulties with the courts, for in making their Duluth arrangement for weighing they both ignored an injunction restraining the mills from grinding or the roads from moving wheat on which they had refused to pay inspection and weighing fees, an order which tied up about 700 cars of the N. P. and G. N. roads until provision was made to secure payment of the fees subsequently established as a legal lien on the grain. In contempt proceedings the court fined the Duluth-Superior Milling Co. \$100 for ignoring the injunction. The cars were subsequently released when the defendants, on order of court, paid \$500 into court as security for the fees immediately concerned and made provision to pay those earned in the future.

Another legal turn was the transference of the suit begun in the state courts by the A. D. Thompson Company against the Wisconsin Grain and Warehouse Commission to the Federal courts. The purpose of this action is not clear, but is said at Superior to be a strategic move only, as the change of base would enable Mr. Thompson, of the plaintiff company, to avoid giving evidence on a citation to appear before a justice of the peace in Duluth by the attorneys for the Commission, whose intention it was to take depositions to be used in the litigation. In order to escape giving out some facts that have been kept secret, it is alleged that the plaintiff company's attorneys had the case transferred.

On October 26 the Railroad Commission of Wisconsin took a hand in the fight by calling on the

N. P. and Eastern Ry. of Minn. for copies of the elevator leases made to A. D. Thompson, said copies to be delivered within ten days. The object of this step is to ascertain the legal right of the roads in question to discontinue the maintenance of the elevators as public warehouses, and if possible to force their reopening as such.

THE NEW LEADER COMBINED FLAX AND GRAIN CLEANER.

In their new Leader Cleaner the J. L. Owens Co. of Minneapolis has kept in mind the construction of a machine for grain elevator or warehouse purposes where space or power will not permit a larger machine or where the services of a larger machine are not required. It has, however, been the underlying principle to produce a machine with large capacity and still confine it to as small space as possible and the combination of special features has enabled the manufacturers to bring about this result.

One of the first features to be mentioned is the twin cone eccentric. It consist rather of two distinct eccentrics and when both parts throw in the same direction the machine is given a one-and-one-half-inch throw, the sweep required for cleaning flax. In a very few minutes the eccentric can

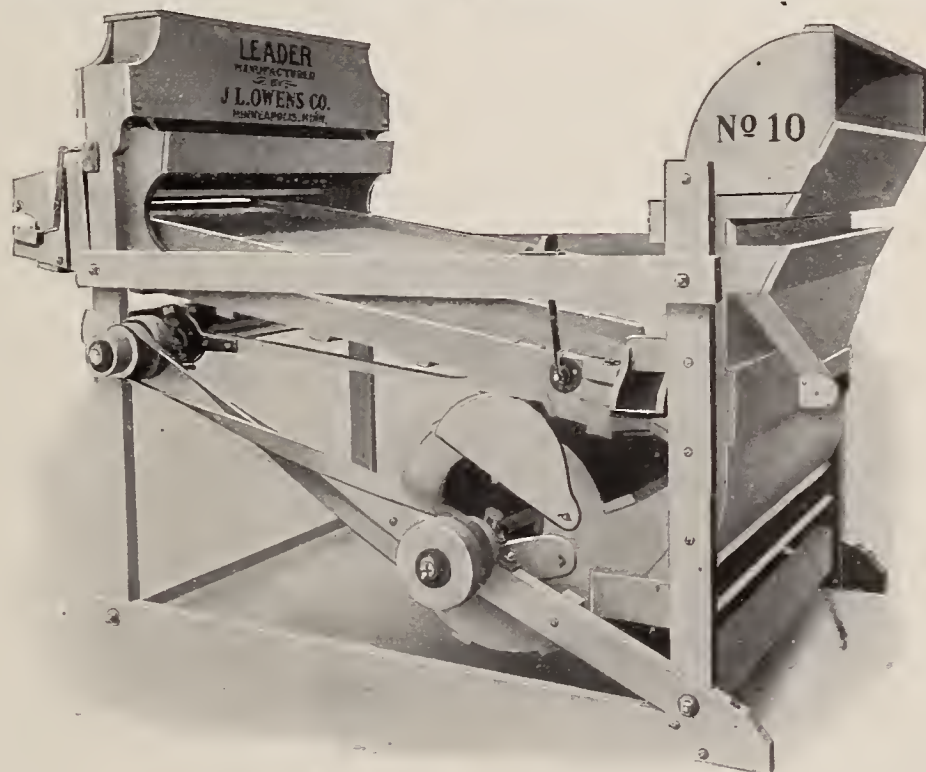
coming from the thrashing machine has considerable coarse straw, weeds, and oftentimes pieces of rope. In cleaning this is very apt to clog the feed. The force feed of the machine obviates any trouble of this kind, as when the feed lever is opened up the grain drops on the force feed board. This is in action with the sieves, consequently anything dropping on the force feed board, be it either grain or foul stuff, is very apt to be forced onto the sieves.

The vertical blast is one of the excellent features of the machine and is controlled perfectly by means of cone pulleys and blinds at each end of the drum.

The machine is constructed in such a way that it needs to be but a trifle longer than the sieves, as in scalping the grain passes in one direction and in screening it passes in the opposite direction. The sieves extending underneath the scalper, it cuts out considerable of the length. All sieves are put in and taken out over the top of the frame, consequently all the floor space needed is what is required to get around the machine.

CORN IN OKLAHOMA.

Corn has not until recent years been considered a successful crop in Oklahoma, except in certain



LEADER COMBINED FLAX AND GRAIN CLEANER.

be changed so that the two parts operate one against the other. This produces three-eighths-inch throw, which is necessary for cleaning wheat. It is also arranged so that the machine can be run at two different speeds, one being 250 revolutions per minute, which is to be used when the eccentrics are set for one-and-one-half-inch throw for flax cleaning, and the other 446 revolutions per minute, which is to be used when the eccentrics are set for three-eighths-inch throw for grain cleaning. It will be readily seen from the foregoing that this makes practically two machines in one, a flax cleaner and a grain cleaner.

The loose sieve frame embraces two frames, one being allowed to play within the other. In this way the sieve frame is allowed to pound against the heavy sill at each end and keeps the wire screens continuously vibrating. This not only causes the flax to fall through the sieve in a heavy stream but also keeps the sieves absolutely clean, thus saving one man's time. This arrangement has been used in all the Owens machines for years and they say they have found it to be the most practical arrangement for keeping sieves clean ever devised.

The scalper takes out all the coarse screenings before the grain or flax gets into the sieves, leaving nothing for the sieves to handle but the finer screenings.

It is a well-known fact that nearly all grain

favorable localities, in comparison with wheat and cotton. Three successive partial failures of wheat, however, have turned farmers' attention toward corn, as an alternative or rotation crop; and the Territorial Board of Agriculture, taking advantage of this interest, in a recent bulletin reminds the people of Oklahoma that by the exercise of better judgment in the selection of seed and the cultivation of the growing crop, corn has steadily climbed until now it occupies a position in the front ranks in point of value. With an average market price in the territory on September 20 of 26.95 cents, practically 30 cents per bushel, corn alone will produce to the farmers of Oklahoma \$11,500,000. The advantages of the territory as a corn producer are somewhat offset by the naturally dry climate; but even so the acreage planted to corn in the territory this year was greater than ever before; and the greatly increased yield was due not merely to the seasonable year but largely to the improved methods of farming, thorough cultivation, seed selection, diversification and crop rotation. Oklahoma, the Board is convinced, bids fair to become one of the foremost states in the production of corn.

An understanding has been reached that grain shortages at Detroit elevators shall not run more than a half bushel to the thousand bushels, and the embargo against the city as a grain port has been lifted by the vessel men.

[For the "American Elevator and Grain Trade."]

FREIGHT RATE LEGISLATION.

BY F. S. RUTHERFORD.

Don't disturb the railroad magnate when he's fixing up his games:
Don't interpose objections with his list of favorite names:
'T would be a shame and pity to knock pet shippers out.
And that's what Teddy Roosevelt is going now about.

Let the rich and influential get the rates that take the corn.
Whether bought for foreign shipping or in the land you're boru:
What an awful thing to happen if the rates should be the same
To every firm and shipper, no matter what the name.

Let the "midnight" tariff flourish, let it beam upon the few.
Though full of frowns and shadows and loss of trade for you.
It brings a world of pleasure and a pocket full of wealth
To the fellow on the inside, and braces up his health.

"Midnight" tariffs are a treasure to the agent and his line:
They secure him all the business and "do" his rival fine:
Then when the corn has vanished, and there's nothing more to "do."
The tariff comes to daylight and is quoted then to you.

They worked it mighty smoothly all last winter to the South.
Took the bread and butter from your children's very mouth.
Took the shoes your children needed, took them from their very feet.
All because of the existence of the "midnight" tariff sheet.

Thousands, yes, and tens of thousands, were deprived of needs of life
By the cruel application of the magnate's cut-rate knife:
Ever ready, more than willing, to engage in honest work.
But thrust aside from action by the "midnight" tariff's dirk.

Worthy senators advise us that the law is at its best:
That if we have been injured, in the courts we'll find the test:
That in the Court is refuge, full reparation there—
Would have us hire a lawyer, and double up our care.

Oh, Senator, you're jesting or you have forgot a thing:
Don't you know to "law" a railroad, one must be a prince or king?
They're lawyers without number, they hire them by the year:
They laugh at people courting, of that they have no fear.
When you "law" with corporations, full of youthly vigor first,
Ere you finish up the business you will surely have the worst:
You'll be old and quite decrepit, long forgot the point at suit.
Will wish you hadn't started, would rather given "boot."

What's the use of acting silly, with an air of wisdom great.
Making tangles and confusion of a common, simple rate:
It's not compiled by magnates, but is figured by a clerk
Who draws no princely salary for doing up the work.

All we ask of Teddy Roosevelt, and all he wants to do,
Is to keep the railroad officers from making things askew;
When their clerks have made a tariff, always made up on the square,
Then let the traffic manager hold to it full and fair.

We need some legislation, and we need it right away,
That will force all transportation to a rule of fairer play;
That will kill Old Technicality and lay him under ground,
And stop forever after rate cutters coming round.

St. Louis, October 30, 1905.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

THE CAR QUESTION.

Editor American Elevator and Grain Trade:—
I have as yet had no difficulty in getting hay or grain along as fast I could handle it, although I know of a number of concerns in Hartford, who are considerably larger consumers than myself, who have had difficulty, principally on grain, as the hay shippers in Indiana, Ohio and Michigan seem to be able to get what cars they need.

As far as any material effect on the market conditions is concerned, I think that the scarcity of cars at the present time and the export demand are the immediate causes for the recent strong rise in oats, wheat, etc., but as soon as

conditions are normal, think there will be a reaction.

Of course the above is my personal opinion only. Yours truly,
Hartford, Conn. IRA C. PECK.

SHIPMENTS INTO VIRGINIA DELAYED.

Editor American Elevator and Grain Trade:—
The car situation seems to be very bad in the West, and there is much delay on a great deal of stuff bought. There is very little hay coming in here now, and the price has advanced very materially; and the advance has evidently been caused to a great extent by the difficulty in securing cars for shipping. It does not seem that conditions will be much better for some time to come.

Yours very truly, McHENRY PETERS.
Lynchburg, Va.

NO CAR SHORTAGE TO SOUTHEAST.

Editor American Elevator and Grain Trade:—
We have heard considerable complaint of late from Eastern shippers regarding the trouble existing up their way on account of "scarcity of cars." This trouble does not seem to exist to much extent between here and the Middle West—from all-rail shipment points; hence our market is not feeling any very severe effects as yet from this cause.

Yours very truly,
J. W. SNYDER & BRO.
Jacksonville, Fla.

NEW YORK CAR RECORD ON BULK OATS.

Editor American Elevator and Grain Trade:—
Enclosed find \$1 to pay subscription for your paper one year. We noticed in last month's issue that the largest car of bulk oats that had ever been shipped into New York was 80,420 pounds. On October 16, this year, we shipped to Carscallen & Cassidy 2,531.01 bushels in car No. 27,789, C. S. Ry. This would again break the record by 573 pounds. We could have put 88,000 pounds in this car if it had been two feet longer, but it was only 34 feet long and 80,000 pounds' capacity.

Yours truly,
MATHEWS MILLING & ELEVATOR CO.
Marlette, Mich. Per W. D. M.

CORN GOES TO OLD MEXICO.

Editor American Elevator and Grain Trade:—
Enclosed please find application blank for the "American Elevator and Grain Trade," together with our check for \$1 for one year's subscription. We feel that the information furnished is worth many times the price of subscription.

We are attaching herewith a clipping covering our contract with the mills of old Mexico for one-half million bushels of wheat. The deal was consummated through Mr. Cortlandt B. Woods, who came to Guthrie in search of wheat for the mills of Mexico.

During the month of October we shipped considerable corn to Galveston for export. Our corn has all graded No. 2 and we are highly pleased with the grading at Galveston this season. Oklahoma corn is in excellent condition for the market, being thoroughly dry. We would have had a much heavier movement, but owing to the scarcity of cars we were hampered considerably in shipments. There will be, no doubt, a very heavy movement from the territory during the month of November.

Yours truly,
THE CAPITAL GRAIN CO.
By Edward A. Stinson, Pres. and Mgr.
Guthrie, Okla.

E. A. Stinson of the Capital Grain Company has just completed a deal with Cortlandt B. Wood, representative of the United Millers' Association, for supplying the Mexican mills with half a million bushels of wheat. This is the biggest contract ever made by any grain company operating in Oklahoma and was secured in competition with dealers from Oklahoma City and other points in the Southwest.

The mills would have preferred all Oklahoma wheat, Mr. Stinson said yesterday, but it will only be possible to ship two hundred thousand bushels from here. The other three hundred thousand will be

shipped from the elevators at Duiuth by water to Tampico, Mexico, and be transshipped there to the Mexican railways.—Guthrie Capital, October 27.

NOT MANY PLUGGED CARS OF HAY.

Editor American Elevator and Grain Trade:—
From a personal observation we do not find "plugged" cars very often, as most of our hay shippers advise us as to what is in their cars; and if it is necessary to put in a few bales of off grades to fill up the car they, as a rule, advise us to this effect.

When we find cars that contain more than one grade we have it officially inspected bale for bale, for in this way the shipper is not able to work any of the off-grade hay through on contract as a higher grade. This costs \$1 per car and is always charged to the shipper. We believe that this method of inspection has caused the average shipper to advise as nearly correctly as he possibly can.

We believe the main trouble with country shippers is that they do not know the grading of hay. We had a number of cases in the past month where parties shipped what they supposed was good hay, but which turned out to contain three or four grades, as well as a great deal of no grade, which sells in our market from \$4 to \$6 per ton. So you see, when they get caught in this shape it is not profitable to let this class of hay come to the market.

Yours truly, THE GALE BROS. CO.
Cincinnati, Ohio. Per P. M. Gale.

CORN IN NEBRASKA IS BIGGER CROP.

Editor American Elevator and Grain Trade:—
The condition of the corn crop, compared with 1904, is about 10 per cent better. The movement will be earlier than last year, but there is difficulty about getting cars, and on that account it is unsafe to contract for future shipment. Farmers are willing to sell at present prices.

Yours very truly,
KENDALL SMITH CO.
Lincoln, Neb. Per. N. B. Kendall.

Editor American Elevator and Grain Trade:—
The condition of the corn crop is better in Nebraska in most every feature except in quality, and that is about as good as last year. The indications at the present time are that the movement will not be as early, but that depends on November weather. The car situation has evidence of being more serious than for a number of years. At the present time there is scarcely any movement of corn, considerable complaint being made of shortage of cars. We do not believe it is safe to sell very much corn for future delivery for the reasons named above.

Farmers are the most independent class of people in the country at the present time, and a large majority of them mark the price of grain on their bins and tell you that when you can pay that for it you can have it, and when it arrives at that price they rub it out and mark it 2 cents higher. Yours truly,

EWART-WILKINSON GRAIN CO.
Lincoln, Neb.

Editor American Elevator and Grain Trade:—
The corn crop in this vicinity is neither as large nor as good quality as last year. Heavy winds about September 1 blew the corn down badly and wet weather since has damaged it.

Considerable corn has already been bought here for November delivery and I look for a liberal early movement if the quality of the corn and the supply of cars will admit of it. There is no grain being shipped from here at present, so the car shortage is not felt, but I anticipate that there will be more trouble on this line of the Missouri Pacific in moving the crop than ever before, as the track and equipment appear to have been allowed to run down rather than improved, and the road appears to be getting more through business than heretofore. And

grain at country stations can generally wait until business secured at terminals like Omaha is taken care of.

Under these conditions I favor being very conservative about contracting corn, either from the farmers or to the receivers.

I believe that farmers are generally satisfied with present prices and will sell quite freely, but I fear that it will be some time, unless we have some dry, windy weather, before much of the corn will grade even No. 3, and while there will be some dry rot there will be plenty of wet stuff also. Yours truly, J. M. ELWELL.

Springfield, Sarpey Co., Neb.

Editor American Elevator and Grain Trade:—
The condition on corn is about 10 per cent better than last year. The general movement will be later, and there is no trouble about getting cars to sell for future shipment. The feeling among the farmers is to hold for higher prices. The fall wheat is in fine condition.

The corn is down very bad, so it is slow picking. Yours truly, JOHN ERICKSON.

Stromsburg, Polk Co., Neb.

Editor American Elevator and Grain Trade:—
The corn crop hereabouts is about the same as last year, but the movement will be later. There is no trouble in getting cars and prices seem to the farmers to be about right.

Yours truly, G. L. EMMINGER.

Osceola, Polk County, Neb.

CORN IS FIRST CLASS IN OHIO.

Editor American Elevator and Grain Trade:—
The condition of the corn crop here is first class, especially when compared with the past three years. I was told by a farmer that it would husk from 60 to 80 bushels per acre, but I think this is too high an average. It will go, however, not less than 50 bushels per acre, and will be of most excellent quality as soon as it gets dry. It is drying very slowly, and will not do to shell for some time yet. No farmer will say that it is safe for a warehouseman to take it. Quite a good deal of the stalk corn is down and many ears are on the ground.

We have not had, as yet, any difficulty in getting cars, and only know of a scarcity through the papers. However, when corn gets in condition to be moved, this will change and we do anticipate much trouble during the winter.

Oats and wheat are fairly well cleaned out, though we expect to handle quite a good many oats before next harvest.

Very respectfully, T. B. MARSHALL.
Sidney, Shelby Co., Ohio.

Editor American Elevator and Grain Trade:—
Compared with last year corn with us is in 50 per cent better condition, but there is not much to ship out. The movement is 10 days earlier than last year; but we find it next to impossible to get cars to ship in.

Corn prices now look high enough. Farmers of course want more money for it; but when the time comes for them to sell, they will let it go.

Yours truly, H. O. BARNHOUSE.
Raymond, Olean County, Ohio.

MOVEMENT OF HAY IN NORTHWEST.

Editor American Elevator and Grain Trade:—
The difficulties we are having in getting cars to load hay are no more than others are experiencing in the different lines of business. The situation is one which has to be made the best of by those who are interested. As regards the forwarding of cars, shipments seem to be pushed through with but very little delay this side of the Mississippi River.

Plugged cars of hay are not common among the receipts of hay, for the simple reason that the average shipper has learned by costly experience that the party who does the unloading has no difficulty in finding the off-grade goods; and when

it is found the discount is a good deal heavier than would be the case where he comes forward in a frank manner explaining what the shipment contains.

As a matter of fact, however, the hay business throughout most of the Western cities is still handled in the same manner that it is in a small hamlet of 25 population. As the hay is brought from the farmer—good, bad and indifferent—and so loaded into a car, so does it arrive here and must be disposed of accordingly. When a car is received loaded in such a manner it simply has to be jobbed out to the best possible advantage; and in a good many cases it is necessary to have two or three parties unload the same shipment.

With the exception of the newcomers, the old hay shippers are all making note of any difference in the quality of the hay loaded in certain shipments, being aware that by so doing they put their commission man in a better position to handle their shipments. The inevitable solution of the hay business in every one of the large cities will be the establishment of central warehouses, as this is the only correct and satisfactory way of handling it. This may take some years, but the growth will simply depend upon the amount of business which each market does.

Yours truly, W. P. DEVEREUX CO.
Minneapolis, Minn.

CORN MOVEMENT IN ILLINOIS.

Editor American Elevator and Grain Trade:—
New corn is about the same as last year as to quantity; the quality is rather better and it matured earlier. The movement, I think, will be a little earlier, provided the market holds up.

I have had no trouble about getting cars when wanted, and farmers seem willing to accept present prices. Of course there are some who always hold, looking for higher prices, and this year is no exception.

As far as regards the situation in rail matters, so far as I have experienced, there would be no trouble about contracting for future delivery; but from the opinion I have formed from reading of the general situation regarding cars, I think it rather risky.

There is a great deal of corn fed in this immediate vicinity usually, and the feeders are preparing to feed again this winter notwithstanding they lost money the past two or three years by feeding high-priced corn to low-priced stock.

Yours truly, T. U. FOX.
Sinclair, Morgan County, Ill.

Editor American Elevator and Grain Trade:—
Compared with last year, the corn crop in this locality (La Salle County, Illinois) is perhaps 5 per cent short; but last year's crop was a bumper. We think the movement will be as early as last year. Cars are plentiful now, but we anticipate a scarcity as soon as winter sets in.

We prefer to sell the futures as a hedge against cash purchases, as this may avoid trouble in the car situation.

Farmers are not disposed to accept prevailing prices now, but we anticipate heavy selling as soon as the corn is cribbed.

Yours truly, ILLINOIS VALLEY GRAIN CO.
Utica, Ill. Geo. C. Dunaway.

Editor American Elevator and Grain Trade:—
Our crop here (De Witt County, Illinois) is about the same average as last year—no better yield. The corn is of a very fair quality here—some dry rot in the spring breaking. If cars are obtainable and weather permitting we think the movement will be about ten days earlier than last year. There is not much difficulty in obtaining cars as yet, but our advices are that the shortage of cars will be the worst in years and will seriously interfere with the handling of the crop.

Farmers are free sellers at 40 cents or contract for future shipment at that price, but we, as well

as most dealers, do not feel safe in contracting in view of the probable scarcity of grain cars when the heavy movement begins. Hoping that our advices and fears are groundless, we remain,

Yours, J. M. GREENE & CO.
Wapella, Ill.

Editor American Elevator and Grain Trade:—
Our corn crop is better than last year and will begin to move earlier. We find difficulty in getting cars, and on that account do not feel that it is a safe proposition to contract for future delivery. Prices are considered by the farmers as about right, but they look for better prices in the future.

Yours truly, A. D. DERROUGH & SON.
Champaign, Ill.

Editor American Elevator and Grain Trade:—
Our corn is in much better condition than a year ago; there is some dry rot, but I think no more than usual, and corn is much dryer than in the average fall. With a fair fall we will see best quality corn for years this winter.

The movement is on now, and is and will be limited only by the car supply. We have as much corn contracted now as we will be able to get cars for during January, and are turning corn down every day, but think we are not losing any, as all roads and dealers seem to be in the same fix.

The prices are satisfactory, in most cases, to farmers, and they would be free sellers if they were able to deliver. We do not feel like contracting very extensively for future delivery, for fear of inability to receive, and with any advance in the market we might have trouble, and we do not see how to protect ourselves. The car outlook is the worst in years, and all railroad agents give us the same news.

Yours very truly, J. E. HAWTHORNE.
Bloomington, Ill.

Editor American Elevator and Grain Trade:—
The car situation in the Southwest is very serious, and it is a very difficult matter to get cars from nearby points to ship to Chicago. Some corn is moving now, and the general movement will begin in a few weeks, provided cars can be secured, which is extremely doubtful. Corn for New Orleans is bought for November and December delivery, but we do not look for immediate relief in the car situation. We do not look for the falling off in the merchandise movement that some shippers do, because the present condition of things is brought about by the general prosperity of the country, and the probabilities are we shall experience the worst car famine we have ever seen.

Yours, W. H. PERRINE,
Chicago. with Harris-Scotten Co.

INDIANA CORN CROP BEST IN YEARS.

Editor American Elevator and Grain Trade:—
New corn will commence moving with us freely about November 10. Our crop is the best matured and of the highest quality that we have raised in ten years. We will have a full average crop in quantity and acreage and will have no off-grade of immature stock such as we had last season. Farmers are disposed to sell on the basis of the present market and we expect a free movement in case present prices are maintained. There is no dry rot in this section.

Very truly, S. BASH.
Fort Wayne, Ind.

Editor American Elevator and Grain Trade:—
Last year's corn crop in Indiana never matured right and it was not a safe crop to handle nor a profitable one. This year's crop is well matured and it will be safe to put it up. It will keep without any trouble. The acreage is large; yield large; quality very good, and farmers will fill up all of their available space, I think, before they sell much. There does not seem to be much dry rot in this section of the country.

The car shortage has not affected us any yet

in this part of the country. The prices are satisfactory with farmers, but their cribs are all empty and they will fill all that they can before selling any. I think one would be safe in contracting if we do not have a car famine later on in the season and catch a big lot of corn that could not be moved.

Yours truly, H. C. CLARK.
Lebanon, Boone Co., Ind.

Editor American Elevator and Grain Trade:—
The corn crop is in much better condition than last year. It is well matured and so large per cent can now be shelled that several cars have been shipped from Berne on short hauls to Michigan.

The car situation is very serious and it surely will interfere with the handling of the crop, and as everybody will get plenty of corn there will be much complaint. The average elevator is too small and in a large elevator the risk is great, as the large elevator gets fewer cars in proportion. There is no dry rust with us.

Farmers will be free sellers at 50 cents a pound and are not figuring on a much better price, considering the loss in pounds.

We are, respectfully,
BERNE GRAIN & HAY CO.
Per C. G. Egley, Mgr.

CORN IN IOWA BETTER THAN FOR YEARS.

Editor American Elevator and Grain Trade:—
The condition of corn as compared with last year is both better and poorer. There is some dry rot, and I think the only thing that will give Iowa an average crop will be the absence of frost in the North.

I do not find the car shortage serious and think it will be safe to contract. Farmers are holding for better prices.

Yours, J. B. ARMSTRONG & SONS.
Shenandoah, Page Co., Iowa.

Editor American Elevator and Grain Trade:—
The corn crop in this section is better than it has been for several years, but not dry enough to ship, for the reason we have had too much warm, damp weather. It will take two weeks of cool, dry weather to put it in condition to handle.

As yet the car situation is not serious, but we are all anticipating a great scarcity of cars the coming winter, but it is now too early to tell how bad it will get. With best wishes, I am,

Yours very truly, GEO. A. STIBBENS.
Red Oak, Iowa.

Editor American Elevator and Grain Trade:—
Our conclusion, arrived at by personal observation and inquiry, is that the southern half of Iowa has a corn crop nearly equal in quality and quantity to last year. The northern half of the state has the largest crop, acreage, quality and yield considered, it has ever raised. In 1903 the north-central portion of the state imported large quantities of corn. In 1904 some stations imported, some shipped no corn and some a few cars. This year shipment will at times be almost a question of cars.

We think, however, the railroads are making great exertions to supply demands. They are using every effort to secure prompt loading and unloading of the cars. It should be safe to contract a reasonable amount at each station for December shipment. As long as cars of coal and hay are detained longer in the loading and unloading than the time consumed in transit the shippers have little cause for complaint.

The lowest yield that has come to our attention in our own territory is 35 bushels per acre. The highest is 90. We assume that with the minimum yield so high the estimate of 40 bushels average for the state is conservative. If a 5 per cent increase in acreage exists, and all competent observers whom we have heard make expressions on the subject believe that such an estimate is reasonable, we have raised the largest crop ever raised in Iowa by many millions of bushels.

A long series of disasters has attended cattle feeding and the number being fed in this state is probably smaller than for several years.

We think the producer will market corn very freely at a price approximating the present one. If the corn crop can be marketed at anything like the prevailing prices we shall see unprecedented prosperity west of the Mississippi and a marked revival in the value of farm lands.

Yours very truly,
DE WOLF & WELLS CO.
Spencer, Clay Co., Iowa.

Editor American Elevator and Grain Trade:—
We have the best corn crop along our line that we have had for the last five years. We feel safe in estimating 45 bushels to the acre on an average of good No. 3 corn. The corn seems to be pretty well broken down and we find that farmers are unusually active in getting it cribbed to have it out of the way for a possible early snow. We think that with good weather the corn will be practically all cribbed by the 15th of November.

Farmers seem to be well satisfied with the present price of corn, and we believe we will have a good and early movement through this entire territory.

We have had no reports of any dry rot in our locality.

Yours truly,
ANDERSON & MOEN,
Estherville, Emmet Co., Iowa.

Editor American Elevator and Grain Trade:—
The corn crop matured in fine shape with no damage from frost or wet weather and no dry rot in this locality.

Comparing it with last year's crop, which was very poor, I would call this crop 50 per cent better, considering quantity and quality. The movement will be much earlier than last year. Thrashing and cribbing are now (November 1) in full swing, with a yield considerably better than at first expected.

I have not experienced any difficulty in procuring cars for small grain, and as this is not a heavy exporting station for corn, on account of heavy local feeding, I do not expect to have trouble. For the last three seasons considerable corn has been shipped in here. This year I expect to ship out quite a lot. Farmers are generally satisfied with present prices. I expect they will market quite freely when through husking.

Yours truly, S. J. CLAUSEN.
Clear Lake, Cerro Gordo Co., Iowa.

MISSOURI CORN DAMAGED BY WET.

Editor American Elevator and Grain Trade:—
The corn acreage was about the same as last year, but the crop was considerably damaged by high weeds and the movement is likely to be later.

We are not doing much shipping at the present time and consequently don't know much about the car question, whether scarce or not.

Farmers rather look for a decline in prices to open the season.

Very truly, R. C. FRERKING.
Alma, Lafayette Co., Mo.

Editor American Elevator and Grain Trade:—
Our corn has not yet been in condition to market on account of wet weather. First, however, the storm of August 16 blew down our corn and damaged it at least 33-1-3 per cent.

Farmers are going to market the corn as soon as it is dry enough. We can't say much about car shortage, as we have not had much to ship lately, and had none to ship last year. We shipped in for feeders and farmers over 10,000 bushels of last crop. We would not contract for future shipments. We do not believe in the reported big crop. It is overestimated, we think. Farmers are not holding on expecting the higher

price for their corn. Corn is all sappy yet. We are paying 35 cents for No. 4 or rejected.

Yours truly, COBB & VARNE.
Odessa, Lafayette Co., Mo.

Editor American Elevator and Grain Trade:—
We had a good corn crop this year, but it is about half rotten on account of so much rain. The movement will be late.

Have made no contracts so far for future shipments, but the farmers are looking for better prices. Yours truly, JACOB BODEY.

Morrison, Gasconade Co., Mo.

Editor American Elevator and Grain Trade:—
Our corn yield is larger than last year, but has been damaged 25 per cent by too much rain. The movement will be earlier than last year, and as there is no appearance here of a car famine we think it safe to contract for future delivery. Farmers, however, are disposed to hold for higher prices. Yours truly, CROW & WHALEY.

Shelbina, Shelby Co., Mo.

NEWS OF THE NATIONAL ASSOCIATION.

Editor American Elevator and Grain Trade:—
My attention has been called to the apparent disposition on the part of some shippers to purposely make over drafts. The members of the Grain Dealers' National Association cannot too strongly put their stamp of disapproval upon such methods. Aside from the fact that it is obtaining money under false pretense, the practice is demoralizing, and has a tendency to cause trouble for innocent people. If the National Association were to condone such usages, the extent to which responsible people would be willing to pay drafts on account would of necessity be materially curtailed. We sincerely hope there will be no occasion for having our attention called to any more cases of this character.

As a result of the deliberations of the Interstate Commerce Law Convention, held in Chicago, October 26 and 27, the Grain Dealers' National Association is pledged to support the President of the United States in his endeavor to secure for the people of the country the enactment of remedial railroad legislation before the adjournment of the next Congress. Every member of the Association is earnestly requested to take advantage of every opportunity to personally interview their respective senators and congressmen, and to importune them to use their voice and vote in the support of such measure or measures as may embody the purport of the resolutions adopted by the Chicago convention. The policy of the railroads always has been to assess all the revenue the traffic will bear, and if we are to have relief from this condition and procure the enactment of such laws as will give us prompt and equitable adjustment, without having to be dragged through the courts for years, now is the time to be up and doing, while we have the support of the chief executive of the government.

A great deal has been said by the railways and their advocates about the constitutionality of conferring upon the Interstate Commerce Commission the powers we propose, but we think that inasmuch as the President has the advantage of being surrounded by the most brilliant constitutional legal talent in the world, we are perfectly safe in pinning our faith to his recommendations.

The work of organizing the Southeastern territory is being pushed with all possible vigor. We realize the magnitude of the task, and inasmuch as it is impossible, at this time, for us to make a personal canvass of that territory, the hearty co-operation of every member of the National is needed. The Southeast is replete with business men of sterling worth, who are anxious to improve conditions, but it is for us to prove to them the sincerity of our effort, and the probable resultant good that would come of their becoming members of the Grain Dealers' National Association.

The only way to secure the greatest good for the

greatest number in association work is to have a thorough organization of the trade represented, and we cannot, therefore, too earnestly urge our members to recommend the Association to eligible non-members.

The arbitration feature is developing into a most potent factor, and its influences are being felt far beyond the boundaries of the organization.

Attorneys are beginning to ask for copies of the opinions of our arbitration committee to be used in their pleadings in court, which fact is a splendid proof of their high standard as authority on technical points which are constantly coming up for adjudication in the grain trade.

Another very important feature of our Association work, which should be recommended, is our trade rules committee. The province of this committee is broader than seems to have been previously understood. Technical points in controversy may be placed before this committee for an opinion, without compromising a case, in the event it should later be placed before the arbitration committee. It should be borne in mind, however, that in submitting a subject to the trade rules committee, all reference to names and places should be omitted.

The distinction between the trade rules committee and the arbitration committee is that the former is to define fixed rules and established customs for the regulation of trade, while the latter is for the purpose of hearing evidence and granting awards. It will be understood from this that a free use of the trade rules committee would often enable disputants to settle their differences without having to carry them before the committee on arbitration.

There are five sets of arbitration papers now in the hands of the committee, and four new cases under way of preparation.

Our new applications for direct and associate members now number thirty-two, and in order that they may be known, and their names entered on your list, you will find them herewith appended: Empire Mills, Columbus, Ga.; H. C. Morgan, Pittsburgh, Pa.; A. C. Schuff & Co., Louisville, Ky.; Ohio Valley Seed Co., Evansville, Ind.; Edw. F. Gocke Co., Evansville, Ind.; Stockbridge Elevator Co., Jackson, Mich.; N. W. Elevator and Mill Co., Toledo; National Milling Co., Toledo; Bartlet Kuhn Co., Terre Haute, Ind.; Howard Kornegay, Selma, Ala.; F. L. Wallace & Co., St. Louis; Crabbs-Reynolds-Taylor Co., Crawfordsville, Ind.; Jones & Morey, New York; Arthur R. Sawers, Chicago; Logan & Co., Nashville, Tenn.; Finch & McComb, Indianapolis; Travis-Emmick Co., Toledo; S. W. Flower & Co., Toledo; the Union Grain and Hay Co., Cincinnati; J. B. Edgar Grain Co., Memphis; Indianapolis Grain Co., Indianapolis; Rubins Bros., New York; B. A. Boyd, Indianapolis; H. W. Robinson & Co., Greensprings, Ohio; Bassett Grain Co., Indianapolis; J. C. Shaffer & Co., Chicago.

New associate members: Grain Man's Guide, Decatur, Ill.; Fairbanks-Morse, Chicago; Weller Mfg. Co., Chicago; H. & L. Chase Bag Co., St. Louis; John B. Daish, Washington; Royal Bag and Yarn Mfg. Co., Charleston, S. C.

Nov. 7, 1905. JOHN F. COURCIER, Secretary.

POSTPONED THE CORN SHOW.

Kansas City has decided to postpone the proposed Corn Congress until November or December, 1906. It was felt that the program proposed could not be developed on a satisfactory scale by January next, the contemplated date. Many of the promoters desired the affair to be held; but when Mr. Miller of the Commercial Club suggested that in January it was customary to have cold weather—down sometimes to 10 to 15 degrees below zero—the committee declined to be responsible for a freeze-out, and the Congress was abandoned until a future time.

The prize corn out of 400 lots at the Mt. Pleasant (Iowa) corn exhibit was sold at auction, the best price being \$5 an ear.

OHIO GRAIN DEALERS.

Let our motto be: "Activity, accuracy, justice." I assure you there can be no higher purpose.—John F. Courcier, Secretary Grain Dealers' National Association.

Ohio Grain Dealers' Association held its regular fall meeting October 20 at the Chittenden Hotel, Columbus, Ohio. No set program had been prepared for the meeting, and there was no special business to come up for consideration. Aside from the talk by Secretary Courcier of the Grain Dealers' National Association and the address on transportation matters by John B. Daish, there was but little general discussion, even on the subject of corn; and the meeting was more of a homelike family gathering.

Secretary McCord was unable to be present, and a few matters which no doubt would have been suggested by him by the nature of his position and acquaintance with affairs of the Association were not mentioned.

President Marshall presided, and in opening the meeting he referred to the great loss Secretary McCord had sustained but a few days previously in the death of his wife.

C. B. Jenkins, Marion, was appointed secretary pro tem., and read the minutes of the meeting at Put-in-Bay last July, which were duly approved as read.

H. S. Grimes: It seems proper that we take some action as an Association on the death of Mrs. McCord. I move you that a committee of three be appointed to prepare a resolution and report at our meeting this afternoon.

The motion prevailed and a committee was appointed, consisting of H. S. Grimes, H. L. Goemann and J. P. McAlister.

On motion by E. W. Seeds, Columbus, a committee to whom all resolutions should be referred was appointed, consisting of E. W. Seeds, Grant McMorran, St. Paris, and H. S. Heffner, Circleville.

In view of the fact that the Association and the local associations were to be represented at the Interstate Commerce Law Convention at Chicago on October 26, the various local associations were called on to select their delegates at the close of the morning session. The importance of this convention to the Ohio shippers was brought out by a number of speakers and a full delegation urged. The names of the delegates were announced at the afternoon meeting.

Mr. Grimes: If there is nothing before the meeting I would like to hear from Mr. Courcier—to have him give us a little talk on the progress of the Grain Dealers' National Association.

Mr. Courcier, secretary of the National Association, told of the progress made during the past few months and of the renewed interest taken in that Association by the grain trade. He said in part:

"This is truthfully somewhat of a surprise. I did not expect to speak now, but perhaps later in the day, after I had heard some of the discussions. I did not come here prepared to make a statement as to affairs of the National Association. When the executive committee appointed me to be secretary-treasurer, they laid the cold facts before me. They were not the brightest, for reasons known to most of you. The question was as to whether the Association would live rather than how it would live. There has been an increase in the regular membership and we now have 29 applications for new regular memberships with dues paid to June 1, 1906. The present board of directors have established a fiscal year and we are now collecting all dues up to July 1.

"The question of affiliation with the Western associations is still under advisement, but we hope to announce results in thirty days.

"Every important reform in the grain business has been originated or championed by the Grain Dealers' National Association, and grain dealers feel it would be an extreme hardship to go back

to the old plan of doing business. The national secretary has plenty of work to do. So long as there is a dealer in the United States not a member there is work to do. The character of the complaints coming to the office indicate there is a good strong work for grain dealers to do. If the Association were dropped grain dealers would be willing to pay \$100 to come back."

Mr. Courcier referred to the matter of the settlement of differences satisfactorily and amicably through the influence of the Association, adding: "If you could spend ten minutes in the secretary's office looking over the files you would say you would put up \$10 for dues rather than to go without the Association." He said it is out of the question for the secretary to stay in his office and know all about what is going on in all cities and sections, but members could write him about any matter and no stone would be left unturned to investigate it. Every member must take upon himself the duty of reporting all differences and should use his best endeavor to get non-members in. It is a member's duty to familiarize himself with the customs and trade rules of his Association and it would do no harm to memorize the trade rules.

The arbitration feature was referred to as one of the strongest arms of the Association. He continued: "The cost is certainly nominal. You could not get the ear of a good attorney for what it costs to be a member of the Association. When the decision of the arbitration committee goes out it may reach a customer of yours and create a more friendly feeling between him and you. Cases are looked after much better by our arbitration committee than by any judge whose calendar is crowded with numerous other cases. If each member of the various associations would have one or more trade papers he would keep thoroughly in touch with association affairs and would be able to make suggestions anent affairs in his own association. With the help and co-operation of each member we will be able to show you in a short time an up-to-date association.

"Let our motto be: Activity, accuracy, justice. I assure you there can be no higher purpose."

Acting Secretary Jenkins called a meeting of the Middle Ohio Association to take place immediately after adjournment of the morning session.

H. S. Grimes announced the address to be given at the afternoon session on Interstate Commerce by John B. Daish of Washington.

AFTERNOON SESSION.

At the afternoon session the following resolution was presented by the special committee and adopted unanimously:

Resolved, That the expressions of heartfelt sympathy of this Association be extended to Secretary J. W. McCord in this, his sad hour of bereavement, caused by the death of his beloved wife, and that a copy of these resolutions be published and delivered to the family.

Mr. John B. Daish was introduced and gave an interesting address, from which the following is taken:

The present transportation problem is the largest and most serious with which the American people are confronted. With the increase of tonnage, not only within our borders, but also to all dependencies, and the large quantity of exports and imports to countries practically on every point of the globe, the question becomes an international one. Thus, you see it is not a sectional question, and it behooves all public-spirited people, men of business as well as men of affairs, to familiarize themselves with the subject and arrive at definite ideas and conclusions. The question is not political, but is definitely personal, for it affects not only what we eat and wear, but even those dwellings in which we have our being.

If you expect that I come to you to-day representing either of the extremes of thought, you will be mistaken. I do not represent that school of thought which lauds the "do nothing" policy, and with folded hands says that the present situation needs no correction. Neither, on the other extreme, do I present myself as an advocate of extreme legislation, and with one loud cry denounce every inch of the 200,000 miles of railways in this country, its owners, managers and operators. Rather do I come with the maxim, "Live and let

live." Some of those within the hearing of my voice are owners of railway securities, and every one who hears what I am saying is affected more or less by railway rates. The rate may mean your bread and butter with or without the jam.

Let us inquire under what headings the present railway abuses may be classed. Are they not divisible into three heads? First, the non-observation of published rates; that is to say, rebates in some form or other—perhaps by direct payment of money, perhaps by midnight tariff. The second head differs from the first, and may be termed unreasonable and unjust rates. If these be published and complied with, the existing law is not violated. It is not all the story that published tariffs should be observed, but it is essential for the well-being of you as individuals and your organization as a whole that the correct classification be given your commodities and the correct figures placed in the tariff sheet. Under the third heading let us place those evil practices resulting from terminal charges, industrial railways, private car lines and the want of reciprocal demurrage. In short, those practices which have grown into abuses through the activity of a few shippers and inactivity of the others.

It is pertinent to inquire what power, if any, exists for the correction of the existing evils and abuses. That the power of Congress in the premises is plenary, as far as interstate transportation is concerned, we are all aware. That the present machinery, as worked out in the Act of 1887 and the amendments thereto is unsatisfactory and inadequate, I need not state to this audience; it has never worked well and has been a cause of constant trouble and expenditure of shippers' money with no adequate relief; in addition it has been shown to be a remarkably slow process. The sole question is: How, in what manner, by what detail, and what class of machinery, shall Congress exercise the power given to it under the Constitution? Bernard Shaw says in his recent cynical work, "Man and Superman," that no man is a match for a woman unless he have a poker and a pair of hobnailed shoes. Whatever the married men may think of this proposition, I say to you that no shipper, or organization of shippers, is a match for the transportation companies of this country without the assistance of a poker and a pair of hobnailed shoes.

The Grosscup plan provides these two weapons in addition to every other weapon known to the law and to equity for the purpose of remedying the existing transportation abuses. Judge Grosscup, as you know, is one of the judges of the Circuit Court of Appeals and resides in the city of Chicago. He is a careful student, and for many years has been investigating and interested in the transportation problem. Likewise a close thinker and logician, he has devised the following plan for the amendment of the Interstate Commerce Act:

1. The creation of a bureau in the Department of Commerce, or a department, or a commission, not to exceed three members, having all the powers of the present Interstate Commerce Commission, together with power to employ counsel and experts, and to prosecute, in the name and on behalf of the United States *parens patriæ*, civilly and criminally, all infractions of the interstate commerce act, including the provision that all rates shall be reasonable and just.

2. The creation of a court of transportation of seven judges, three of whom shall be appointed to the court for life, the other four being designated from the Circuit Court for terms of three years. This court to sit en banc in the city of Washington and such other places as it may designate, and at *nisi prius* in the respective judicial districts of the United States whenever any case in that district may arise.

3. The clerks of the Circuit Court for the several districts and the marshals thereof shall be clerks and marshals *ex officio* of this court, and juries shall be drawn for this court as for the Circuit Court and District Court, and juries shall be interchangeable between the Circuit and District Courts and this court.

4. One or more of the judges of this court shall constitute a quorum when sitting at *nisi prius*, and four shall constitute a quorum when sitting en banc.

5. The court shall have jurisdiction of all cases, civil and criminal, arising under the interstate commerce act.

6. The court shall have the full powers of a court of chancery to enjoin finally, temporarily or provisionally any infraction of that act, including the provision of the act that all rates shall be reasonable and just.

7. Appeals shall be from any order, decree or judgment of the court sitting at *nisi prius* to the court en banc. But such appeal shall not suspend the order, decree or judgment appealed from, except upon the special order to that effect of the court sitting en banc, or of four judges thereof, and then only upon the conditions named in order of suspension.

8. The Supreme Court of the United States may review the judgments, orders and decrees of the court of transportation on certiorari; but the right of appeal to the Supreme Court shall be limited, as to the case of appeal from the existing Circuit Court of Appeal.

9. The Court of Transportation may of its own motion certify cases to the Supreme Court, or stated questions in cases, on which the opinion of the Supreme Court is desired.

10. Whether sitting en banc or at *nisi prius*, the court shall proceed in every case brought before it with the greatest practicable dispatch, immediateness of remedy being declared to be one of the highest remedial rights of the parties to the suit.

I want to say to you, and I am fortified by the judgment of Judge Grosscup, that the plan is constitutional, and I take it that it would be of no value for me to discuss with you as laymen the legal and constitutional questions involved.

The plan means simply this: That you would have an investigating body into whose ears you could pour your tale of woe, and if justified in your view of the situation the government would take up the fight for you in the most powerful court known, namely, an equity court, whose doors are always open and whose duty it would be by any or all of the forms of process to correct the evil complained of.

The plan will afford relief—a relief that is plain; a relief that will prove adequate; a relief that will be complete; and, further, it will provide a speedy relief—something that the shipper wants. He does not want long drawn out and expensive proceedings and secure a victory at a distant time when commercial conditions have so changed that in all probability he has been irreparably injured.

If the existing situation is to be ameliorated at the forthcoming session of Congress, it will be necessary to have earnest and energetic work on the part of business interests. The members of Congress are, I believe, alive to the situation, but they do not know exactly what the business men of this country want. That the business men—the shippers, the men who pay the freight, the men who are active and informed on the subject—want the Grosscup plan is attested by the indorsement of many leading mercantile firms whose annual business aggregates over two billions of dollars. To have adopted a plan which is plain, adequate and complete will require work in and out of season, and it remains for you to determine whether or not you shall have the legal machinery which will carry out the equity maxim, "Wherever there is a right there is a remedy."

Mr. Grimes: Mr. Daish omitted to mention in his remarks on the Grosscup plan the point of how long a shipper would have to wait under that plan before he gets relief.

Mr. Daish explained the method of procedure under the Grosscup plan, giving the opinion that greater speed would obtain in securing relief under this plan than under the present law or any other proposed law.

Mr. Nut, Sidney, wanted to know what progress has been made in the Interstate Commerce matter and what its present status is.

Mr. Seeds said the Interstate Commerce Commission is powerless to give relief in transportation matters and spoke of the President's plan, which is for immediate relief.

S. E. De Wolf, Marion, spoke of rate peculiarities as experienced by himself. He said the Hocking Valley road would haul his grain to Sandusky for 1.3 cents a hundred, but demanded 6 cents a hundred to haul smokeless coal 20 miles, so he hauls it in wagons and saves \$18 a carload. "If this and other bodies would endorse the President's plan it would put the railroads on the defensive. If a rate is wrong and it were known, we could have it corrected and let the railroads fight it out afterward."

The report of the committee on resolutions, being along the line of the discussion, was presented by the chairman and adopted as follows:

Whereas, The railroad companies of the country have been granted special privileges and powers, because of the service they are expected to perform for the general public; and

Whereas, The course pursued by the managers and men who control these public service corporations, since the adjournment of Congress, with reference to the rate legislation, so called, seems to us unjust and unfair; and particularly as from the information at hand there seems to be an organized effort on the part of the transportation companies and a few large shippers who enjoy special privileges, or are closely connected with

railroad management or ownership, to pack the meeting of the Interstate Commerce Law Convention to be held in Chicago on the 26th inst., and

Whereas, The existing laws have proven wholly inefficient, and the present method of procedure through the state and the United States courts entirely inadequate to obtain any relief for the shipper or locality affected by unjust discriminations, owing to the great expense and long delay in prosecuting any case, we believe it expedient at this time to express ourselves definitely and forcibly on the matter of the regulation of freight rates, through a body which can act promptly and effectively, whenever injustice or discrimination is shown; therefore

Resolved, (1) That we indorse the recommendations made by President Roosevelt on this subject in his last message to Congress, and especially that portion of the message which recommends that the Interstate Commerce Commission be empowered to substitute reasonable rates in lieu of rates declared by the Commission to be unreasonable, after full investigation.

(2) That we request and urge our senators and representatives in Congress to support the Esch-Townsend bill, or a similar measure embodying practically the same principles and agencies, to assist in giving the shipping interest of the country generally a "square deal."

President Marshall: If there is any man that needs castigation it is the scoop shoveler. If there are any operating in your locality let us know about it.

In the matter of delegates to the Interstate Commerce Law Convention at Chicago Mr. Seeds read from a circular showing an organization to be entitled to one delegate for each 100 members and one additional delegate for each 200 members or major fraction thereof. Under this the Ohio Association was entitled to two delegates and each of the local associations one delegate. Delegates to the convention were appointed as follows: Grant McMorran, St. Paris; D. W. McMillan, Van Wert; Frank Tanner, Mansfield; R. Turner, Avery.

Alternates: Clarence Pierce, Union City; T. B. Marshall, Sidney.

Secretary J. W. McCord, Columbus, and H. S. Grimes, Portsmouth, were named as delegates to represent the state Association.

President Marshall called for a general discussion on the question of the condition of the corn crop and the outlook in various sections of the state, but only three members had anything to say. The members apparently were satisfied with the outlook and thought there was nothing to talk about. After the meeting several had considerable to say about the car shortage.

C. M. Myers, Lockbourne, said it would be a hard proposition to handle corn for a little while, but thought it would be in condition to handle in two or three weeks.

J. E. Wells, Quincy: We must be governed on this corn question by where we are located. I understand there is some being handled in the southern part of the state. We can't handle any for three weeks.

S. E. De Wolf: I move that a copy of the resolutions adopted here this afternoon be sent to President Roosevelt to show him we are backing him the best we know how.

The motion prevailed and the secretary instructed to send a copy of the resolution to the President.

National Secretary J. F. Courcier requested the members when ordering new letterheads to have printed on them: "Members Ohio Grain Dealers' Association, affiliated with the Grain Dealers' National Association."

Adjourned sine die.

COLUMBUS NOTINGS.

One chief inspector was there: E. H. Culver.

Lead pencil "reminders" were presented by the Grain Dealers' National Association.

A. S. Garman, Akron, representing the Huntley Manufacturing Co., was the only machinery man present.

Visitors in attendance were John B. Daish, Washington, D. C.; Allen R. Foote, Columbus, commissioner Ohio State Board of Commerce;

W. W. Shaw, representing the "American Elevator and Grain Trade;" W. G. McClintock.

Toledo, Chicago and Baltimore grain markets were read by the secretary after the close of the various exchanges.

R. A. Sheets, representing R. S. McCague, Pittsburgh, presented each with an aluminum comb, one end of which was finished off as a paper knife.

If you want to accomplish something definite in rate matters adopt Daish's football tactics: Unite your forces, make a flying wedge and tell your representatives in Congress what you want, "morning, noon and night and in between times." Keep after them until you get relief.

It doesn't cost anything to print on your letterheads, when ordering a new supply, the fact that you are a member of the Ohio Grain Dealers' Association, affiliated with the Grain Dealers' National Association, as suggested by Secretary Courcier, and it may be of real value to you sometime. It lends tone to your letterhead.

Columbus dealers at the meeting were: E. R. McDonald, representing Hardesty Bros., millers; G. M. Williams, of the Williams Milling Co.; J. P. McAlister, C. E. Switzer, representing J. P. McAlister & Co.; E. Stritmatter, representing A. Felty; A. S. Tingley, C. H. Tingley, E. W. Seeds, H. L. Robinson, of Baum & Robinson, W. S. Cook of McCord & Kelley, C. O. Peters, inspector for Ohio Grain Dealers' Mutual Fire Insurance Co.; E. R. Woodrow, R. F. Miller.

Receivers represented were as follows: Pittsburgh; D. G. Stewart & Geidel, by J. A. Albert Geidel; Keystone Commercial Co., by John R. Johnston; Hardman & Heck, by D. V. Heck; Herb Bros. & Martin, by Ren. Martin; J. W. Smith & Co., by J. E. Guyton; R. S. McCague, by R. A. Sheets; H. G. Morgan & Co., by H. G. Morgan. Baltimore: Charles England & Co., by Charles England; J. A. Clark, W. Rodgers. Cincinnati: Gale Bros., by A. C. Gale. Toledo: J. F. Zahm & Co., by Fred Mayer; J. J. Coon, by Wm. Cummings; C. A. King & Co., by J. C. Keller; Southworth & Co., by K. D. Keilholtz; J. F. Courcier, secretary Grain Dealers' National Association; H. W. Kress; Goemann Grain Co., by Henry L. Goemann.

Dealers at the meeting were: L. W. Baker, Maplewood; C. F. Barnhouse, Upper Sandusky; C. O. Barnhouse, Agosta; T. W. Baum, Duvall; J. W. Channel, Melvin; O. P. Cheney, Canal Winchester; R. G. Calvert, Selma; J. F. Coppock, Fletcher; J. S. Dewey, Blanchester; H. A. Dillon, North Lewisburg; S. E. DeWolf, Waldo; F. O. Diver, Middletown; Ogden Edwards, Troy; J. L. Edwards, Condit; E. C. Eikenbary, Camden; H. M. Faulkner, Pemberton; L. Finkenbine, Anna; O. G. Grant, Grove City; J. O. Gooding, Lewis Center; E. A. Grubbs, Greenville; H. S. Grimes, Portsmouth; Chas. E. Groce, Circleville; J. P. Gundy, Carroll; F. P. Hastings, Cedarville; H. S. Heffner, Circleville; Willis Jones, Mt. Sterling; C. B. Jenkins, Marion; R. S. Kerr, Bellefontaine; G. W. Lamb, Hooker; C. H. Lindner, Bucyrus; Z. S. Myers, Gettysburg; J. G. Myers, Pleasant Hill; C. M. Myers, Lockbourne; T. N. Marfield, Chillicothe; J. H. Motz, Brice; T. B. Marshall, Sidney; Dale McMillen, Grover Hill; E. E. Nut, Sidney; Petersine & Toman, Gettysburg; J. E. Pierson, Condit; C. S. Pierce, Union City; C. N. Perril, Bowersville; C. K. Patterson, Piketon; H. E. Rapp, Sabina; H. W. Robinson, Greenspring; C. Rhonemus, Reesville; J. I. Smith, Circleville; J. C. Shaeffer, Carroll; Omer Snyder, Fremont City; L. J. Smith, Marion; J. M. Smith, Bucyrus; J. H. Swonger, Brice; Frank H. Tanner, Mansfield; H. O. Thoms, Prospect; J. W. Thatcher, DeGraff; J. T. Vent, London; H. N. Woolley, Prospect; H. J. Weaver, Galion; P. J. Weimer, Greenville; H. C. Wagner, Pleasant Corners; John Wren, Dunnquat; R. T. Watson, Union City; J. E. Wells, Quincy; J. B. Van Wagner, London; Foos Zartman, Jamestown.

THE CAR FAMINE.

The car famine in all parts of the country and the grain blockade at Buffalo show as yet no signs of yielding, except that on some exceptionally well-managed roads in the West the famine is not so serious as elsewhere or as it is likely to be now that new corn has begun its regular winter movement. Oklahoma, where new corn has been ready to move for some weeks, has been suffering seriously for a month for cars for both corn, wheat and flour; and at a conference of millers and grain men, held at Oklahoma City about the middle of October, it was urged that unless relief were soon obtained shippers should invoke the Noffsinger reciprocal demurrage law of the territory, making it compulsory for railroads to deliver cars within four days after a demand is made, or else the roads are liable to the shippers one dollar per day, after the four-day limit expires, and also for any damage the shippers may incur as the result of not getting the cars on time. In the wheat country of the West and Northwest elevators are everywhere filled to overflowing; and in the corn country deliveries of grain are becoming very heavy. In the Southwest a good deal of this grain is dumped on the ground alongside the tracks for a month.

At Buffalo there has been a glut of grain pretty much all through the navigation season, growing worse, of course, as the season has advanced, on account of the failure of the railroads to carry off the grain as fast as it comes in. This state of things is popularly known as an elevator blockade, though it really has nothing to do with the elevators beyond the fact that those in commission are not large enough to hold all the grain that comes in during the fall. Seldom has it happened at any time that more grain has come in than the elevators could handle until the houses in operation become filled, then there is a stop until the roads relieve the pressure. This they have not done this season, and grain boats arriving after October 20 were held a week or even more for unloading, costing the vessel a round trip for each week of detention, and necessitating high rates from head of lakes and Chicago to pay for the demurrage.

The complaint against the Buffalo roads is that they make no effort to move grain to tidewater. They in turn plead the unprecedented movement of general merchandise, yet it appears that in 1898 they carried out of Buffalo 190,000,000 bushels of grain and only 55,000,000 bushels this year to October 15, or 75,000,000 bushels as the maximum amount for the season, showing that they have not in the least kept pace with the growth of their own business; and both inland millers of New York and exporters of grain suffer therefor. As early as October 10 the railroads confessed their impotency at Buffalo and by agreement with the New York Produce Exchange issued notification that:

All contracts made after October 7 will be accepted by the railroads after October 10 subject to delay and with the understanding that should there be any delay in Buffalo resulting in increased storage and insurance the railroads shall be reimbursed for the same by the shipper, but not exceeding one cent per bushel, quantity limited to storage capacity of Buffalo elevators.

The Buffalo situation, which is due to railway inability to handle the business and the current pool methods there, has emphasized the need of the new Erie Barge Canal. The New York Commercial Bulletin attributes the following to a representative of one of the largest grain houses, referring to the absolute need of canal transportation:

The occasion for the new Erie Canal is well exemplified by present conditions at Buffalo. The argument of the railroads as to the readiness with which they can outdo any Buffalo-New York waterway which may be constructed appears farcical in the light of to-day. The roads have contended that the benefits of any canal will be incidental because of the constantly decreasing cost in railroad transportation, the increased capacity of cars, etc. To-day is exhibited the roads absolutely laying down on grain business Buffalo to New York

because, as alleged, they have not the equipment, but in point of fact because their equipment is diverted not to local traffic, as stated, but to other through business paying higher rates than grain. As a makeshift, the Buffalo roads have recently condescended to handle Buffalo grain business to the seaboard, but subject to delay and contingent on the shipper paying all accumulated charges at Buffalo pending delay in furnishing cars. This latter step is contrary to the custom of a lifetime. The acquiescence of the New York Produce Exchange in thus temporizing is not creditable and will no doubt be followed shortly by more vigorous steps. A storm of protest has been aroused in the West. As matters stand New York merchants are practically put out of business, either forced to buy all rail from the West or do no business at all. It is understood steps of a nature which it is known in advance will force the railroads to give suitable attention to New York's grain business will shortly be taken by combined interests at New York, Buffalo and Chicago. The exact nature of this proceeding is being kept in the dark, however.

The blockade is hard on New England consumers of grain as well as on exporters, as local prices have advanced sharply. As early as October 10 grain in cars at Boston was bringing 2 to 4 cents per bushel premiums. As New England dairy and egg farmers compete in butter and eggs with the produce of the West, which goes forward on a low-freight schedule, the pinch of a premium on feed is a sharp one.

Grain men in Canada are equally handicapped in their business; and on October 18 the grain section of the Toronto Board of Trade adopted a resolution requesting the Railway Commission of the Dominion "to inquire into the question and take whatever action is necessary to prevent discrimination and compel the railways to provide proper facilities to handle the business with reasonable dispatch."

Canadian vessel owners, says the Toronto Globe, complain of the car service from Depot Harbor and other Georgian Bay ports to Montreal, and their views are being presented to the Railway Commission. They claim that the shipping capacity afforded them by the Canada Atlantic is only 100,000 bushels per day, while the Canadian vessels engaged in the trade can deliver twice that amount if allowed to unload without delay. It is also claimed that while the American vessels operated by the Grand Trunk Railway between American lake ports and Depot Harbor apparently take their turn with the Canadian vessels in waiting for elevator capacity, their contributions to the trade reducing the remaining railway capacity to about half the demands of the Canadian vessels, because there is an insufficiency of cars to meet the requirements of all vessels engaged in the lake grain trade.

As to this, however, the Grand Trunk people at Montreal say that that company is giving the same service from Midland as last year and if the same service were given as from Depot Harbor, it would simply mean that in a few days all the elevators at Montreal would be filled up and the congestion would be just as marked as at present.

DRYING GRAIN.

Hoffmann, a leading German authority, attributes particular importance to the drying of grain for brewing purposes, the properties of dried grain and its power of resisting external influences being greater than those of the same grain when damp. Dry grain retains its germinating power longer, and is also cheaper to purchase, owing to its larger proportion of dry matter. Since it is also worth more money than damp grain, the question of drying is equally important for the agriculturist, the grain and transportation companies, insurance companies, the miller and so on all down the line.

Minnesota poultry farmers will next year experiment with the growing of kaffir corn for feed.

A farmer near Great Falls, Mont., reports a yield of 317 pounds of potatoes from a single pound of seed. Another reports a yield of 1,244 bushels from a single acre.

COMMERCE LAW CONVENTION.

The attempt of the influences antagonistic to the movement for railway rate reform, begun several years ago at Chicago and known since as the Interstate Commerce Law Convention, of which E. P. Bacon of Milwaukee has been and still is chairman, was successful at Chicago on October 26 and 27 only in so far that a rival convention was organized. Active antagonism to its purposes had been anticipated by the Convention; and so when the Commerce Law Convention was called to be held at Chicago on October 26, the following pledge was prepared to serve in a way as the credentials of the delegates to that body:

We, the undersigned delegates, for ourselves and for the association or organization which we represent, indorse the principle of the call for the Interstate Commerce Law Convention, and indorse and agree to support the legislation as outlined in the President's last annual message to Congress, to so amend the interstate commerce law that the Interstate Commerce Commission shall be given the power where a given rate has been challenged, and after full hearing found to have been unlawful, to prescribe what shall be the lawful and proper rate to take its place; the ruling of the Commission to take effect immediately.

This pledge was signed by no less than 350 delegates (including representatives of the Chicago Board of Trade and the grain dealers' associations) who met at Steinway Hall, while as many others who would not agree to the above pledge organized another meeting at the Fine Arts Building music hall in the immediate neighborhood.

The regular convention organized by electing W. E. Hughes of Denver, a noted representative of the Western cattle interests, temporary chairman, Mr. Bacon being at home ill, and P. E. Goodrich of Winchester, Ind., secretary, with George A. Schroeder of Wisconsin as assistant. On taking the chair Mr. Hughes among other things said:

Congress, in its legislation prescribing the rate, has said all rates must be reasonable, just and non-discriminatory. If a given rate is challenged as not being such, it is a mere matter of detail to search it out, ascertain the facts and apply the standard. This is administrative or judicial work, and, of course, it can be delegated to a commission or an administrative body, with power, in case the challenged rate differs from the legislative standard, to suspend it, with or without notice, temporarily substituting therefor a rate, or maximum charge, beyond which the railroad shall not go, until the matter is judicially determined.

The Interstate Commerce Commission can now decide that a given rate, when challenged, is unreasonable, but it has no power to decide what, under the circumstances, would be a reasonable rate. Congress, by declaring that all railroad rates must be just and reasonable and non-discriminatory, already has fixed the standard, done the legislative part of the work. Now, when it empowers the Commission to apply this standard to a given rate, which has been challenged, the power so delegated is, in our opinion, clearly administrative.

This is the President's position, as we understand it. This is what the people I represent want, what the people of the great West want, and what we shall earnestly and persistently demand.

Former Governor S. R. Vasant, of Minnesota, said that the railways were making a mistake to oppose the proposed legislation. "There will be government regulation or government ownership of railroads before this fight is ended; which it will be depends largely on the managers of the railroads. If they do not want government ownership they will cease their opposition to the President's plan for preventing the enforcement of rates which are unreasonable. I congratulate you that the long fight is about to end. A determination will be reached during the next session of Congress. The conflict will soon be on in all its fury."

Others present at the meeting were Governor Cummins of Iowa, and former Governor Laramie of Wyoming.

On the second day an executive committee was elected, composed of the following members: E. P. Bacon, Wisconsin; C. H. Seyfarth, Missouri; S. H. Cowan, Texas; J. E. Howard, Kansas; William Larrabee, Iowa; R. W. Higbee, New York; Murod Mac Kenzie, Colorado; S. W. Gardiner, Mississippi; R. S. Lyon, Illinois; Adolph Muller, Illinois;

J. M. Mason, West Virginia; Joseph H. Call, California; John W. Kern, Indiana; L. C. Slade, Michigan; W. B. Stillman, Georgia; W. E. Hughes, Colorado.

This committee subsequently organized by electing the following officers: Chairman, E. P. Bacon, Milwaukee, Wis.; vice-chairman, J. E. Howard, Wichita, Kan.; secretary, Adolph Muller, Illinois; treasurer, R. S. Lyon, Chicago.

Joseph H. Call, chairman of the committee on resolutions, in presenting the report among other things said:

We want the power, which for ten years everybody believed was vested in the Interstate Commerce Commission, restored to that body, so that railroad rates may be regulated and the public protected from freight tariff discrimination.

The resolutions, which were unanimously adopted as originally drafted, although many amendments were reported, were as follows:

Resolved, First, that we, the delegates assembled in convention at Chicago under a call issued to these commercial, producing and manufacturing organizations that sustain the President of the United States in his publicly expressed views as to the interstate commerce law amendment, congratulate the country that Theodore Roosevelt, as President of the United States, has shown his wisdom and patriotism in recommending to Congress constitutional effective and just measures for the regulating of interstate commerce, that shall provide for the people a national tribunal with power to substitute a reasonable and just rate of classification for one proven to be unreasonable and unjust, and yet that shall preserve to the railroads just and reasonable control over their properties and revenues. We also commend the House of Representatives for having shown a spirit of earnest co-operation with the President in his efforts to thus remedy existing transportation evils.

Second, We specifically agree with the President that the only constitutional and effective method for the supervision of rates, classification and practices is by amending the interstate commerce acts so as to provide that:

"The Interstate Commerce Commission should be vested with the power, where a given rate has been challenged and after full hearing found to be unreasonable, to decide, subject to judicial review, what shall be a reasonable rate to take its place; the ruling of the Commission to take effect immediately and to obtain unless and until it is reversed by the court of review."

Third, The amendment of the interstate commerce act should be sufficiently broad to cover all interstate transportation service, including all charges, regulations and exactions in connection therewith, whether provided by railroads themselves or through arrangements with others.

THE "RUMP" CONVENTION.

The rump convention, so called, held simultaneously at the Fine Arts Building, was as large a body as the regular Convention. It was organized by the election of Nelson W. McLeod, National Lumber Manufacturers' Association, St. Louis, as chairman; G. X. Wendling, California Sugar and White Pine Manufacturers' Association, San Francisco, vice-chairman; F. J. Bradley, Haverhill, Mass., second vice-chairman; and T. B. Aldridge, Denver, as secretary.

Overtures were made to the Steinway Hall (regular) convention for a peace conference, but the latter would accept no compromises; whereupon the Fine Arts Building meeting proceeded independently. Many plans for a solution of the rate problem were offered, some of which were as follows:

Francis B. Thurber, president of the United States Export Association of New York, presented the resolutions adopted by the National Board of Trade at Washington last January, favoring an amendment to the interstate commerce law to permit reasonable traffic agreements by railroads under the supervision and control of the Interstate Commerce Commission, etc.

Charles J. Truxler of the Northwestern Lumbermen's Association of Minneapolis presented a set of resolutions demanding legislation to remedy abuses, but opposing the creation of a "cumbersome court with a code of untried practice and procedure" or the vesting of "doubtful powers upon an inadequate court." The resolutions favored a

"commission appointed by a non-partisan and non-political agency, with power to determine violations of law and make skillful procrastination or disastrous delays impossible," and an organization of producing and allied organizations of the country to crystallize the "best thought of the country" and bring the same to the attention of Congress.

Former United States Senator C. H. Dietrich of Nebraska offered a preamble and resolution objecting to "conferring rate-making powers upon the Interstate Commerce Commission in any degree," but recording the meeting as opposed to unjust discrimination in any form in the operation of our public highways.

John I. Platt of Poughkeepsie, N. Y., presented a resolution protesting against giving the Interstate Commerce Commission power to fix rates unless provision be made for giving a hearing to those who may represent the shorter but vastly greater traffic within the separate states.

David M. Parry, president of the National Association of Manufacturers, of Indianapolis, urged a set of resolutions adopted at the last convention of his Association at Atlanta in May, which favor, dealing adequately with the rebate evil in all of its forms, but do not indorse the proposition for government rate-making because it is a "start toward Socialism in this country." The Parry plan provides for a bureau of interstate transportation, which shall be an adjunct to the Department of Commerce and Labor, to be charged with the duty of adjusting or prosecuting all complaints of discrimination, and when it is impossible to adjust differences to prosecute the complaint before a special court of transportation to be created by Congress.

The following resolutions were finally adopted as the program of the gathering:

"We declare as a fundamental basis of our deliberations and of our purposes an unquestioning faith in the wisdom, integrity and high purpose of President Roosevelt, our appreciation of his influence, which permeates every branch of government, every industry and all development of the entire nation, and our confidence in his leadership.

"We recommend definite action by this convention looking to the establishment of a permanent organization, which shall be representative of every state and territory in the Union, and shall be the nucleus for all future work that shall become necessary hereafter to carry out the expressed will of this Association. To that end, we suggest the selection of a general committee, which shall be charged with the duty of transmitting to congressional committees on interstate and foreign commerce, during the next session, the action of this convention.

"We are unalterably opposed to conferring upon the Interstate Commerce Committee, or to any appointive agency, the power to prescribe specific rates for transportation, believing that such action would prove a dangerous experiment, inimical to the best interests of commerce and the continued development of this country.

"Recognizing existing evils connected with the transportation interests of the country, viz., all forms of rebates or favoritism extended to one individual or locality to the disadvantage and detriment of others, private car lines, industrial terminals or switching lines, manipulation of freight classification, unfair and unequal distribution of freight equipment, etc., we demand the most rigid enforcement of laws, which, if found to be inadequate, should be so amended as to provide speedy, efficient and permanent relief.

"We recognize the great and almost universal dissatisfaction with the interstate commerce laws as now administered or enforced, as due to the delay in reaching a determination of questions demanding early and final settlement, and we urge upon our citizens the imperative necessity for providing the necessary machinery for relief."

With 1,500,000 bushels of wheat in the warehouse of the Farmers' Warehouse Co. at Milton, Ore., the mill at that place has been compelled to import wheat to keep its rolls going, as the farmers refuse to sell.

Secretary Ewer, of the Farm Products Association of Michigan, is making a personal canvass of the state for members and is meeting with nice success. As the entrance fee has been abolished, the total expense of membership is now only \$10 for dues per annum.

NEW GRADING RULES AT CHICAGO.

The proposed new grades of grain for Chicago have been printed by Chief Grain Inspector W. Scott Cowen and distributed among the members of the Chicago Board of Trade for their consideration before the rules are officially adopted by the state grain inspection department and the Board of Trade. Mr. Cowen has been working on a revision of the present rules for some time and has frequently conferred with the grain inspection committee of the Board of Trade to insure thorough satisfaction.

A number of the present grades are eliminated, and several are changed. For example, in the proposed rules the grades of white winter wheat remain unchanged; but No. 1 and No. 2 Long red winter wheat are eliminated, and hard winter wheat grades, while not changed, are printed in the rules in full as follows:

No. 1—Hard Winter Wheat—Shall be hard winter wheat of both light and dark colors; sound, plump and well cleaned and of the varieties known as hard winter wheat.

No. 2—Hard Winter Wheat—Shall be hard winter wheat of both light and dark colors; sound and reasonably clean and of the varieties known as hard winter wheat.

No. 3—Hard Winter Wheat—Shall include hard winter wheat not clean and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel, and to be of the varieties known as hard winter wheat.

No. 4—Hard Winter Wheat—Shall include hard winter wheat, damp, musty, or from any other cause so badly damaged as to render it unfit for No. 3 and shall be of the varieties known as hard winter wheat.

In case of mixture of hard winter wheat with red winter wheat, it shall be graded according to the quality thereof and classed as hard winter wheat.

Red winter wheat grades are unchanged except that in No. 1 the words "of the short berried varieties" are eliminated.

The Colorado wheat grades are changed to read "Pacific white wheat" and a No. 4 grade is added. A grade of Pacific red wheat is established for the red Russian wheat. The Pacific wheats come under rule 2 as follows:

RULE 2. PACIFIC WHEAT.

No. 1—Pacific White Wheat—Shall be sound, dry, plump, well cleaned, and free from smut and smut balls.

No. 2—Pacific White Wheat—Shall be sound, dry, reasonably clean, reasonably free from other grain and smut and smut balls.

No. 3—Pacific White Wheat—Shall include wheat not plump, sound and clean enough for No. 2, and testing not less than fifty-four pounds to the measured bushel.

No. 4—Pacific White Wheat—Shall include all Pacific white wheat that is damp, musty, smutty or otherwise so damaged as to render it unfit for No. 3.

No. 1—Pacific Red Wheat—Shall be sound, dry, plump, well cleaned and free from smut and smut balls.

No. 2—Pacific Red Wheat—Shall be sound, dry, reasonably clean, reasonably free from other grain and smut and smut balls.

No. 3—Pacific Red Wheat—Shall include wheat not plump, sound and clean enough for No. 2, and testing not less than fifty-four pounds to the measured bushel.

No. 4—Pacific Red Wheat—Shall include all Pacific red wheat that is damp, musty, smutty or otherwise so damaged as to render it unfit for No. 3.

NOTE—The grades of Pacific white and Pacific red wheat are to include such wheats as are grown in the extreme Northwest and on the Pacific slope from either spring or winter seeding.

No change is proposed in the spring wheat grades, mixed wheat or uncleaned spring wheat.

Grades for durum (macaroni) wheat are established as follows:

RULE 5. DURUM (MACARONI) WHEAT.

No. 1—Durum Wheat—No. 1 durum shall be bright, sound and well cleaned, and be composed of durum—commonly known as macaroni wheat.

No. 2—Durum Wheat—Shall be sound, dry, reasonably clean, may be slightly bleached or shrunk, but not good enough for No. 1.

No. 3—Durum Wheat—Shall include all wheat

that is bleached, smutty, or for any other cause unfit for No. 2.

No. 4—Durum Wheat—Shall include all wheat that is very smutty, badly bleached and grown, or for any other cause unfit for No. 3.

MIXED DURUM WHEAT.

In case of admixture of durum wheat with wheat of other varieties it shall be graded according to the quality thereof, and classed as No. 1, 2, 3 and 4 MIXED DURUM WHEAT, with inspector's notation describing its character.

Yellow corn in grades below No. 1 shall be 90 per cent yellow instead of three-fourths yellow as at present, and white corn shall be 95 per cent white instead of seven-eighths white as in the present rules. Grades are established for 4 yellow, 4 white and 4 corn. Kiln-dried corn shall in no case grade higher than No. 3. The new grades are:

No. 4—Yellow Corn—Shall be ninety per cent yellow, badly damaged, damp, musty, or very dirty.

No. 4—White Corn—Shall be ninety-five per cent white, badly damaged, damp, musty or very dirty.

No. 4—Corn—Shall be mixed corn that is badly damaged, damp, musty or very dirty.

The present grades of oats are unchanged, but grades of yellow oats and mixed clipped oats are to be established as follows:

No. 1—Yellow Oats—Shall be yellow, sound, clean and reasonably free from other grain.

No. 2—Yellow Oats—Shall be seven-eighths yellow, sweet, reasonably clean and reasonably free from other grain.

No. 3—Yellow Oats—Shall be seven-eighths yellow, but not sufficiently sound and clean for No. 2 Yellow, and must weigh not less than twenty-two pounds to the measured bushel.

No. 4—Yellow Oats—Shall be seven-eighths yellow, damp, badly damaged, musty or for any other cause unfit for No. 3.

No. 1—Mixed Clipped Oats—Shall be mixed oats, sound, clean, reasonably free from other grain, and shall weigh not less than thirty-six pounds to the measured bushel.

No. 2—Mixed Clipped Oats—Shall be mixed oats, sweet, reasonably clean, reasonably free from other grain and shall weigh not less than thirty-four pounds to the measured bushel.

No. 3—Mixed Clipped Oats—Shall be mixed oats, not sufficiently sound or clean for No. 2, and shall weigh not less than twenty-eight pounds to the measured bushel.

Oats that have been sulphured, bleached or chemically treated shall not be graded at all.

There is to be no change in the rules affecting rye nor in the instructions relative to "new" grain, "reasons" and "test weight." The grades of No. 4 barley and Scotch barley are eliminated. Other barley grades remain unchanged.

MEETING OF THE CENTRAL KANSAS GRAIN DEALERS.

Pursuant to call, the grain dealers located on the Main Line and Lincoln Branch of the U. P. R. R. met in Salina the afternoon of November 2. The meeting was called to order by Secretary Smiley, who appointed J. T. White of Ada to act as chairman.

The following subjects were discussed: "How Can the Country Shipper Assist in Securing Better Weights at Terminal Markets;" "Kansas Grain Dealers and Millers and Their Relation to One Another;" "Some of the Advantages of Being Friendly with Your Competitors."

A paper was read by T. L. Hoffman of Enterprise, on "Arbitration vs. Litigation."

The taking of 100 pounds per car at terminal markets was discussed, and the following motion made by Taylor Miller of Salina was adopted:

Resolved, That the shippers present write the secretary protesting against the practice of deducting 100 pounds per car at Kansas City, and that the secretary of the Association present the protests to the attorney-general, with the request that he immediately take legal steps to have the practice discontinued in the state.

It was decided to hold local meetings in Salina, subject to the call of the secretary.

The following firms were represented: Hoffman Elev. Co., Enterprise; John T. White & Son, Ada; Longford Elev. Co., Longford; Salina Produce Co., Salina; Western Star Mills, Salina; Taylor Miller, Salina; Ross & Waldo, Ellis; A. J. Poor Grain Co., Kansas City; M. Chamberlain, Beverly; M. G.

Graham, Zurich; Plainville Mill & Elev. Co., Plainville; W. J. Gilchrist, Seguin; E. T. Crumm, Hoxie; Thomas C. Dick, McPherson; Webber & Pierano, Wilson; S. C. Groth & Co., Ellsworth; John McClune, Carlton; R. T. Morrison Grain Co., Kansas City; J. C. Bradley, Rossville; M. W. Lewis, Grainfield; E. J. Smiley, Sec., Topeka.

NEW MEMBERS IN KANSAS.

The following firms and individuals have become members of the Kansas Grain Dealers' Association since August 1 last:

E. I. King & Co., Logan; W. H. Miller & Co., Rexford; J. F. Jones, Grinnell; Hart & Anderson, Jamestown; Cheney Mill Co., Cheney; W. W. Smith & Co., Hollyrood; Baker & Weedman, Hollyrood; J. F. Cheatum, Cleveland; Security Milling Co., Abilene; Mead Seed & Grain Co., Mead; A. M. Hungerford, Mahaska; Tyler & Co., Junction City; L. H. Powell & Co., Wichita; American Grain & Flour Co., Wichita; A. D. Steele, Berwick; E. D. Runnals, Longford; Rock Island Grain Co., Abilene; Hoffman Elev. Co., Enterprise; W. R. Cunningham, Morland; V. C. King, Plainville; G. W. Stober, Moreland; Roos & Waldo, Ellis; Smith Klock & Co., Dexter; M. P. Thielcn, Dorrance.

RECONSIGNMENT AT ST. LOUIS.

The Railroad and Warehouse Commission of Missouri has issued the following notice in a series of rulings:

"It is ordered that, effective November 1, 1905, the following shall be the rules governing switching and reconsigning charges on grain and hay received at St. Louis, Mo.:

Rules 1 and 3—On grain or hay consigned to St. Louis or East St. Louis locally and ordered immediately to elevator, team track, or private track of receiving line, no charge for switching.

Rules 2 and 4—(a) On grain or hay consigned to St. Louis or East St. Louis locally and ordered "hold;" and (b), on grain consigned to points beyond St. Louis or East St. Louis, billed to "order of" or "notify" St. Louis or East St. Louis parties, and ordered "hold"—free delivery to elevator, team track or private track of receiving line, or delivery to direct connections; provided, disposition is furnished by consignees within the free time provided for by car service rules. After this time, regular switching or reconsigning charge, minimum of \$2 per car, will be made according to movement.

We are advised on the best of authority the railroads are not likely to obey the rules, except in the case of two, which immediately on the issuance of the order signified their intention to comply with its terms. In the event, however, of the roads defying the order, the Railroad and Warehouse Commission will at once take the offending road into the Supreme Court to compel compliance.

This reconsigning charge has been unjust, unreasonable, totally illogical and unsupported by any argument whatever other than, being a source of considerable revenue, the railroads wanted to exact it. In issuing the order prohibiting this charge by the railroads the present Railroad and Warehouse Commission has manifested a desire to foster the central markets of Missouri and to protect shippers thereto from an arbitrary tax imposition by the railroads.

REOPENING ELEVATORS AT PHILADELPHIA.

The Pennsylvania Railroad's larger elevator at Girard Point, Philadelphia (1,250,000 bushels' capacity), was reopened for business on October 23 and the smaller house (1,000,000 bushels' capacity) will be opened as soon as corn begins to arrive in quantity. Last April, at which time export grain business was dead, one of the Girard Point elevators was closed down, while the other big elevator has been closed for two years, all export grain consigned by way of the Pennsylvania Railroad having since April been handled through the 500,000-bushel Washington Street Elevator.

[For the "American Elevator and Grain Trade."]

CONSTRUCTION, CARE AND MAINTENANCE OF GRAIN ELEVATOR PROPERTIES FROM AN INSURANCE STANDPOINT.

BY EDWARD DINSLEY.

General Agent Millers' National Insurance Company.

The old adage, "An ounce of prevention is worth a pound of cure," is most applicable to the subject under discussion, as the ounce of prevention in this case means proper construction, cleanliness and order, necessary repairs and ample fire-fighting appliances.

It is the object of this article to point out to the owner, or assured, of grain elevators what can and must be done in the construction, caring for, maintaining and protecting of their elevator properties against fire in order to secure the lowest possible insurance cost in a mutual fire insurance company. The per cent of loss is the great determining factor of cost in a mutual company; hence, the fewer losses a mutual company sustains, the less the cost of insurance to the insured.

The best known means of preventing fires in elevators is proper construction, proper care, proper maintenance and ample fire-fighting appliances. To those contemplating building new elevators, I would advise consulting a mutual fire insurance company before building, and the latter will furnish you with all information necessary to build and equip your elevator so as to secure the lowest possible insurance basis rate, as well as economy in operation, and will also instruct you how to care for, maintain and equip it with fire-fighting appliances to reap the full benefit of the very lowest possible insurance cost.

It is not necessary, in this article, to go into details of construction, except in calling your attention to a few insurance "Don'ts."

DON'T use wood or wood split pulleys in elevator heads or boots. If you have any, replace them with iron pulleys at once.

DON'T use a gravity-feed gasoline engine. If you have one, replace it with a pump-feed.

DON'T fail to put the gasoline supply tank under ground, and at least fifteen feet away from the frame buildings of the plant.

DON'T fail to sweep down the cobwebs and dust from the walls and ceilings, frequently, and keep the whole premises clean and orderly at all times.

DON'T fail to keep at least one barrel of salt water on the working floor and Texas, with fire-pails at each barrel.

DON'T allow smoking on the premises.

DON'T fail to check up your agent often and carefully.

DON'T refuse to comply with any reasonable suggestions from a mutual fire insurance inspector regarding changes and improvements in your risk, as the best results from a mutual insurance company are obtained only when the insured fully and cheerfully complies with the company's requirements regarding the changes necessary to reduce the fire hazard of their risk.

It is easier to care for and maintain some classes of elevator properties than others, owing to construction and arrangement, but all classes can be properly cared for, maintained and protected with well directed and persistent effort on the part of the owner or management.

Build your elevator with as little unnecessary waste floor space as possible. What I mean by that is, put no more space into the working floor than is absolutely necessary without crowding and put every possible cubic foot into storage. Every foot of unused working floor, or cupola space, means that much more space for dust, dirt and cobwebs to accumulate, and that much more time and effort to keep clean. As cleanliness is an omnipotent factor in insurance, you can see the force of this reasoning.

Whether you have the kind of elevator described above or one that is the very reverse, it is possible

to keep one as clean and orderly as the other, only one takes more time and persistent effort than the other, and as some, from the nature of their work, labor harder for their money than others, the one owning the latter kind of elevator must necessarily work harder to keep it up to the standard of requirements of the mutual companies. It will also cost him more money and effort to keep it in repair, as well as provide fire-fighting appliances, and his insurance will cost him some more than his brother grain dealer who has a more modern elevator, as his basis rate will be higher, but that is the penalty incurred by constructing his elevator without taking into consideration the insurance cost.

Moral.—Consult a mutual fire insurance company before building your elevator and they will tell you how to build and equip it to get the lowest possible insurance cost, as well as economy in operation. Keep your elevator clean and orderly and in good repair and well supplied with fire-fighting appliances, and you will be doing business at the "same old stand" when your more careless competitor is "down and out."

NEW DEAL FAVORABLE TO MEMPHIS.

For the account of the Southern Railway and the Illinois Central Railroad Company the Standard Trust Co. of New York has secured a three-year option on the controlling interest in the stocks and bonds of the Tennessee Central Railroad and the Nashville Terminal Company. These properties will be operated in the interest of the two railway companies, both of which now obtain an entrance into Nashville.

It is reported that at least \$2,000,000 is to be spent in extending the terminal facilities at Nashville and other improvements.

The grain and hay trade at Nashville is jubilant over the prospect of practically two new roads. The Illinois Central taps extensive hay and grain producing localities and traverses a stretch of country from which Nashville draws a large percentage of its supplies. Nashville has a local grain and hay association whose members are very much alive and are not slow to appreciate benefits and prospective benefits. They unite in favor of any proposed improvement for Nashville and are always linked with the progressive element in the community. They say the present move in railroad matters is worth a vast sum to their grain trade alone.

NO LAWS AGAINST MONOPOLIES.

Since the organization of the Washington State Millers' Association and the announcement of Washington millers and grain buyers that they would not pay the same price for smutted wheat as for clean grain, in spite of the State Grain Commission's refusal to authorize a discount or dockage for smutty wheat, that organization has been locally denounced as a "trust," in league with another trust, supposed to have been organized by the exporting wheat buyers of that state and Oregon. The existence of these influences in the grain trade of the Coast it is no part of ours to affirm or deny; but the charge has been instrumental in producing an opinion from the attorney-general of Washington which presents the state of Washington in the unique light of having no law to punish trusts.

In reply to an inquiry by W. H. Reed, deputy state grain inspector, asking if such a law were in existence in that state, the attorney-general said:

After considerable research, I have not been able to find anything in state or federal statutes which makes such acts criminal. The matter would seem to be more properly one of state jurisdiction, and beyond the scope of federal legislation, unless it should directly affect interstate commerce or the exercise of governmental functions under the United States Constitution. Such combinations or collusions, however, are against public policy, in a way, upon which it is more or less difficult to predicate a remedy under our present laws.

The constitution of this state, under section 22

of article 12, forbids monopolies and trusts; and such combinations as are referred to in your letter are clearly "monopolies" as defined by the common law, to which we must look for a definition of this term. They are, therefore, clearly illegal both under this constitutional provision and at common law. The term "monopoly," as now understood, embraces any combination the tendency of which is to prevent competition in its broad and general sense, and to control prices to the detriment of the public.

After quoting section 22, article 12 of the state constitution, the attorney-general continues:

As will be noticed, the first part of this provision declares that monopolies and trusts shall never be allowed in this state, while the latter part of the provision declares that the legislature shall pass laws for the enforcement of the section by adequate penalties. Our legislatures have never, so far, passed laws carrying penalties for the enforcement of this constitutional provision, and it may be considered that such constitutional law as this is not specially self-active without having penalty of law to enforce it.

Under article 12 of the state constitution, as a similar instance, railroads are forbidden to issue passes to officials and others and in other ways discriminate in the matter of charges, but these things could never be enforced until the passage of laws containing penalties, as was the case when the recent railroad commission law was passed.

While I can cite you to no direct statute in this state, or in the federal laws, under which such combination as you mention could be prosecuted, it is yet to be supposed that for every wrong under the law there is a remedy, and though parties engaged in such illegal transaction could not be prosecuted criminally in this state under the present state of the law, they undoubtedly would be liable to a civil action for damages to persons prejudiced or injured by their unlawful acts (see section 20, Amer. & Eng. Enc., p. 864, 2d Ed.), and it might be possible that a court of equity would interfere at the instance of individuals by injunctive relief, in order to prevent a multiplicity of suits where the injuries complained of are continuous and calculated to produce injury.

The acts mentioned or complained of would scarcely come within the meaning of the federal anti-trust law, known as the Sherman act, which relates solely to interstate commerce, unless it would be shown in the matter of exportation, etc., that there is a direct bearing on interstate commerce.

I do not, at this time, feel justified to give you more direct or pertinent encouragement without knowing more of the facts and premises of the case, to the end that a successful prosecution could be made in such matters, under the law as it exists; but I would suggest that this is probably a field for good work at the hands of our coming legislatures.

CORN GROWING IN MISSOURI.

Although Kansas City has abandoned for this year her proposed "Corn Congress," the Missouri Corn Growers' Association and the managers of the institute work in that state will have many exhibits of corn in competition for prizes next winter. "Corn shows are going to be held at farmers' institutes of the state this winter," said Elmer E. Laughlin, of Rich Hill, president of the Missouri Corn Growers' Association, and that Association has decided to offer prize ribbons at every place in the state where corn is exhibited between now and the state corn show in January. This, it is believed, will stimulate competition. There is an undoubted growing interest in the culture of corn and in the improvement of the grades of corn, and the Association managers look for some excellent displays this season. The improvement of corn, the great grain crop of Missouri, involves also the improvement along many other lines of agriculture; and the Association and the institute management have commissioned Mr. Laughlin to tour the state as a lecturer. He will visit a dozen farmers' institutes, lecturing on corn and its culture, and it is at these institutes that the corn contests will be held, the winning corn at each institute to be entitled to compete at the Association's state contest, when \$400 in prizes will be offered. The dates for farmers' institutes which he will attend, as far as announced, are: Otterville, November 17; California, November 18; Vienna November 19, and Linn, November 20. M. F. Miller, professor of agronomy at Columbia, also will attend

these institutes and will deliver lectures on the subject of agriculture.

The Missouri Corn Growers' Association was organized about two years ago by the students of the Missouri Agricultural College at Columbia. It includes in its membership nearly all of the leading corn growers of the state.

SOUTHWEST MISSOURI DEALERS.

Missouri grain dealers and commission men met at Moberly, Mo., October 20, on a call issued by Secretary Stibbens, of the Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri.

President Hunter, reviewing the purpose of the present meeting, said he felt that this part of the country ought to be organized as an association separate from the Grain Dealers' Union. Much could be done in behalf of the grain trade of Missouri by means of an association.

W. W. Pollock of Mexico thought much good had been accomplished by the Association so far, but in his section of the state the great difficulty is to get the dealers sufficiently interested to go to the meetings. He thought much more could be done and would be done were there a state organization.

J. H. Wayland spoke of the unsatisfactory results attending a shipment to a St. Louis commission house when the grain was sold to points South and Southeast with destination weights to govern. He thought the St. Louis trade ought to devise a scheme whereby the Merchants' Exchange weights would be secured on all wheat shipped to St. Louis commission merchants.

J. D. Parrott of St. Louis, in reference to this matter, said when a shipper instructs that his grain be sold on destination weights at a premium of so much per bushel there was no alternative but to comply with his instructions. He was opposed to selling on destination weights and said shippers ought to specify definitely that Merchants' Exchange weights apply on their consignments.

Missouri dealers continue to lose money every season through lending bags to farmers and condemn the practice heartily, but unless concerted action is taken by all the dealers its discontinuance in many instances would divert much grain to a competitor. At Odessa, Mr. Cobb said, they have made arrangements to have a disinterested party let out bags to farmers at so much per bag. The plan works all right and they are not having any trouble nor losing any more money through lending bags.

REBATE INDICTMENTS.

A federal grand jury at Louisville, Ky., on October 23 returned an indictment in nine counts against Sebastian Zorn & Co., T. G. Williams and Jesse A. Bushfield, charging the defendants with having illegally secured rebates on grain shipments, favoring certain shippers and districts, and discriminating against others. The defendants were admitted to bail in the sum of \$2,000 in each case. Mr. Williams is a member of the firm of S. Zorn & Co., and Bushfield, a clerk for the firm. The defendants all gave bond for their appearance for trial in the United States Court in March, 1906.

The indictment alleges that Messrs. Zorn & Co. used fraudulent or false expense bills for the purpose of obtaining a reduction from the regular rate to the Southeast of 3 cents per hundred (under the familiar shrinkage system in vogue at Louisville). The first two and fifth counts relate to shipments to Columbus, Ga., with rebates of \$9.60, \$12 and \$16, respectively; other counts are based on shipments as follows: To Birmingham, Ala., with rebate of \$12; to Fitzgerald, Ga., with rebate of \$10.87; to Talladega, Ala., with rebate of \$13.67. In all of these counts the use of fraudulent expense bills to obtain the shrinkage allowance is charged. The last three counts are based on rebates of 3 cents per hundred demanded and obtained on shipments to Atlanta, Talladega

and Columbus, the amounts saved being \$9.72, \$12 and \$7.80 respectively.

Among the questions involved in the shrinkage system as presented to the Commerce Commission is whether the carrier by the publication of the rates and regulations which make the shrinkage possible are violating the commerce act.

In Kansas City fourteen railroads have been cited to appear before the Supreme Court to answer to the charge of contempt of court, having continued the practice of paying rebates after having been ordered to discontinue the same. It is alleged that the secret service men have evidence to warrant an investigation of the claim departments of the railroads, particularly where shrinkages, breakages and "lost in transit" claims are paid.

MISTAKE OF THE OAT BEARS.

The great mistake of the bears this year was in not going into the oat situation deep enough. They argued that a big crop in this country must necessarily mean very low prices. It has been so long since this country has done a big export business that the possibility of its renewal was, perhaps, entirely overlooked. But the first two months of the crop movement developed a decidedly general demand in coarse grains. Export shipments have been made to London, Liverpool, Glasgow, Avonmouth, Bristol, Hull, Hamburg, Bremen, Rotterdam, Antwerp, Cardiff, Rochefort, Havre, Marseilles, Leghorn, Bordeaux and Genoa. This indicates the general nature of the demand for oats. It has been pointed out, however, that the export shipments have not been large. While this is true, the sales for export have been enormous. The sales for shipment up to spring very largely exceed the visible supply, and it has been impossible to fill some contracts already due.—Rollin E. Smith in Commercial West.

MULLER OF NEW ORLEANS PREDICTS.

Secretary Fred Muller, of the New Orleans Board of Trade, on his return from the Little Rock banquet to President Roosevelt, while discussing the visit of President Roosevelt to the South, said:

"I consider his coming to the South coincident with the financial emancipation of the South. I think the time has come when the South should take a hand in the great questions affecting our national life, and I say the time has come when we must assert ourselves against those who seem to be determined to use the resources of our great country corruptly. The South, especially, stands upon the threshold of a wonderful development, which, however, can only be brought about by a substantial and sound business administration, and not through frenzied financial manipulations. I hail the President's visit as the commencement of an era of commercial evolution."

THE NEW GRAND TRUNK ELEVATOR.

The work is progressing rapidly on the 1,000,000-bushel steel elevator which the Grand Trunk System is building at Midland, Ont. The E. A. Bryan Co. of Chicago are the architects and engineers of the work and the machinery equipment will be supplied by the Kingsland-Kay-Cook Manufacturing Co. of St. Louis, Mo. The equipment will include complete outfit of power transmission machinery, marine leg, boat scrapers, belt conveyors and trippers, car couplers, etc.

A car of new crop shelled corn was received at Toledo on October 20. It was very wet, warm and heating and graded no grade. It was local, coming from Wood County, Ohio. The first in last year was in on October 27.

FACTS AND FIGURES

Feeders have been contracting freely in Iowa for new corn at about 35 cents.

The record price for Texas rough rice at the mills this season to October 31 was \$4 per barrel.

Manitoba has already marketed over 16,000,000 bushels of wheat at ports east of Fort William.

The "Mexican June" variety of corn did well in Oklahoma this year as an experimental crop.

Free exports of grain are attracting to New York tramp steamers from all parts of the world.

The rice warehouses of Texas are filled with new crop rice, 80 per cent of which has been marketed.

October exports of wheat from Portland, Ore., and Puget Sound included about 35,000 tons to San Francisco.

Galveston made her first export corn shipment for the season on October 28. It was 120,000 bushels to go to Belfast.

The Kansas State Board of Railway Commissioners will have a hearing on grain rates at Topeka, beginning to-day, November 15.

The Dakota Elevator at Buffalo set a new pace at Buffalo, N. Y., by unloading 50,000 bushels of wheat from a vessel in 1½ hours.

Successful efforts to grow wheat, oats and barley in the Yukon country of Alaska were made during the past season on several tracts near Ogilvie.

New Orleans exports of wheat for October were 184,000 bushels, all to the continent of Europe; of corn, 162,857 bushels to England, and of oats, 150,224 bushels to London.

Baltimore received its first car of new Western corn October 17. It was consigned to Thomas S. Clark & Sons. The first car of new mixed corn was received by the Pitt Bros. Co.

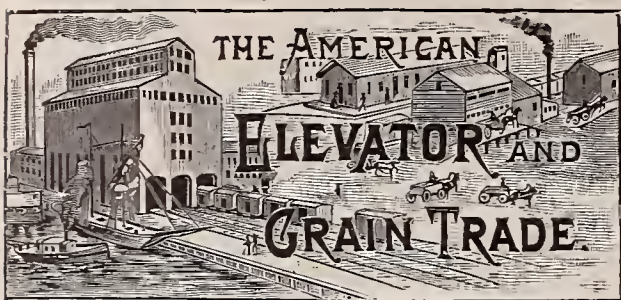
Minneapolis grain and flour shippers are talking of appointing a railroad commissioner to have charge of local railroad questions concerning their interests. W. M. Hopkins is the probable appointee.

About one-half of the wheat and cattle exported from Canada via the United States passes through Portland, Me. During the fiscal year 1905, 18,514 Canadian cattle and 2,531,449 bushels of Canadian wheat were exported through that port.

With 75,000 sacks of oats ruined on the La Conner flats by the early rains, most of the farmers of that section of Washington are holding for an advance in price, and up to the present time less than one-third of the oats raised on the flats this year have been sold or contracted for sale at a later date.

Grain exports for the first nine months of the current year amounted to 105,219,693 bushels, as compared with 48,573,706 for the same months last year. These reports for this year are preliminary and estimated to include 97 per cent of the actual shipment. This year the corn exports have been 82,752,212 bushels, as compared with 34,411,771 bushels for the corresponding months last year. The September export of grain this year amounted to more than 10,000,000 bushels over September of 1904.

Tom Worrall's book on the "grain trust" of Nebraska is out, and, of course, all the papers of that state are advertising it. As anticipated from the nature of Mr. Worrall's legal attack on the association of that state, it is simply a roast of the "line elevator" companies operating in that state, which, of course, represented a large part of the elevator membership of the Nebraska Association, but not all, and the innocent individual members are roasted as are the line companies, which Mr. Worrall well knows is anything but a square deal. However, the book is of the sort that will disturb the bucolic mind, but hardly cause an explosion in grain trade circles.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., NOVEMBER 15, 1905.

Official Paper of the Illinois Grain Dealers' Association.

COMMERCE LAW CONVENTIONS.

The split of the Commerce Law Convention at Chicago was inevitable. There are always those who are never satisfied with a definite proposition of reform, but must needs chase will-o'-the-wisps. Chairman Bacon, or the author of the Steinway Hall pledge, being shrewd enough to see what was coming, was justified by the effect of the pledge used as a credential; for at least the Steinway Hall meeting had something definite to propose in the way of a program, and consistently kept the organization to the text of its own conservative proposition which had already received the approval of the President and which, as Senator Knox told the Pittsburg Chamber of Commerce, on November 3, the President will insist upon as the administration's policy of rate control.

The rump, or Music Hall, convention, on the other hand, did just what might have been expected—nothing. It represented probably more interests than the Steinway Hall meeting and perhaps for that very reason it formulated no definite program except that it voiced the familiar "unalterable opposition" to endowing any "appointive agency" with the power to prescribe rates, etc. It "recognizes evils," yet it was opposed to any and all plans, so far as can be seen, that have as yet been proposed for correcting those evils. It declares "an unquestioning faith in the wisdom of President Roosevelt," except of his railroad policy; and its only frank pronouncement was that same "unalterable opposition" to all forms of national rate control, approving only the negative policy endorsed by the railway apologists themselves.

In short, the trail of lumbermen and man-

ufacturers, beneficiaries of the jerk-water railroads that get the rebate called a "division of the rate," was pretty easily traceable to the front door and even to the committee room of the Studebaker Building.

NEW GRADING RULES AT CHICAGO.

New inspection rules for the grading of grain at Chicago have been prepared by the chief inspector, W. Scott Cowen, and definite action will be taken on them within the next few days. The proposed rules establish a grade of golden oats which the consuming trade has been discounting heavily this year. Grades also are established for durum or macaroni wheat, of which heretofore there has been but very little received at Chicago. There are also some pretty important changes in the corn rules, in that yellow corn shall be 90 per cent pure and white corn 95 per cent pure.

This reduction of the adulteration allowed is in the interest of the growers of these kinds of corn, for both of which there are specific demands by established industries. Both the growers and the consumers should be protected by the rules; and Mr. Cowen's amendments will be welcomed by both.

As industry becomes more and more specialized grain dealers who mean to keep in the race must begin to do business with that fact in mind. It is useless to urge farmers to grow better corn if they are to get no more money for the best than for the average; and dealers who handle the stuff from the farmers must, sooner or later, get away from the common practice of dumping everything that comes to them into one bin and shipping it all out as "3 or better," if the business of farming and that of the grain dealer in this country are to be brought to their highest estate and be possible on \$150 land.

A QUESTION OF EQUITY.

The track bidder "3 or better" makes a definite proposition; the seller accepts a definite proposition. Other conditions of the contract being understood, there is nothing ambiguous about it. It is as clear as the parabolic contract with the vineyard laborer at a penny a day. But like some of those laborers who had "borne the burden and heat of the day," some sellers "3 or better" now complain that having delivered "better" they do not get a premium. Are they entitled to one?

Legally speaking, they are not, since they only live up to the terms of a contract freely entered into. Ethically speaking, the case is different; and the report of Mr. T. B. Marshall of Ohio, that a Buffalo bidder has so far recognized the contention of the Ohio Association, that when bidders reject or dock shipments grading worse than "3" they should pay a premium for "better," appears to be at least one man's judgment of the ethics of the case. But while favors of this sort, which to the regular track seller would be like "getting money from home," not infrequently become the established custom, for obvious reasons, one hesitates in saying, as to this matter, little more than "we hope so"; for so long as track

sellers will exercise the option of delivering "better" when they are asked to deliver only "3," track bidders as a class will naturally be slow to give up so great an advantage.

The seller "3 or better" is under no obligation to deliver "better" on a contract calling for "3," he is permitted to do so—not required. He might, if he were disposed to take pains, consign his "better" and track sell his "3"; but this means that he must put more work into his business management; just as all tradesmen and others expect to get the best results only by taking infinite pains. If the track bidder is willing to offer a premium for "better," well and good, but the dealer who sits down and complains because bidders do not so word their offers has only himself to thank if he delivers cream on a skim-milk contract. He can get the premium at any time. But it is up to him to earn the premium before he gets it.

ELEVATOR SITE LEASES.

Certain railroad companies of Iowa and the Northwest have entered upon new policies with regard to leases of elevator sites on their right-of-way that are anything but reasonable.

The Great Northern, for example, has made most radical changes in its form of lease, such as making revocation by the lessor possible at any time on six months' notice; requiring the installation of such fire apparatus as shall be approved by the railroad company, although the latter is by the terms of the lease held blameless in case of fire from any such source as locomotive spark, while the tenant is made liable for all loss to outside property, or to grain of other persons in transit, caused by fire originating in an elevator, whether said fire be caused by locomotive spark or otherwise; requiring the painting of all buildings with such colors as the engineer of the road shall direct; and finally the lease would permit the agents of the railroad company to have free access to the elevator at any time to inspect the scales and the handling of the grain, as well as the books, papers and vouchers of the elevator company, the expense of such examination to be paid by the tenant.

In Iowa the disposition, as far as at present appears, is to make the sites leased pay a profitable ground rental aside from their value to the railroads as freight makers and handlers.

Both propositions are grossly inequitable. The country grain elevator is more profitable to the railroad than it is to its owner in most cases. In any event, as to the operator, it is a means only, not an end, and is profitable to him only as a storage place and labor-saving machine mainly for the farmer's benefit and convenience; it seldom earns carrying charges. To the railway it is a convenience that relieves it wholly of the expense and responsibility of caring for grain tendered it for transportation and of the burden of loading it into cars, as it becomes responsible for and loads ordinary merchandise tendered for transportation.

For this service of the country elevator the

railroads pay nothing, notwithstanding they pay liberal unloading allowances to the men who lease on nominal terms and operate for their own benefit the railroads' own houses at the terminals, thus confessing that they, the carriers, are bounden to perform a duty to the public from which the country elevator wholly releases them. To come forward, then, with a cut-throat lease like that proposed by the Great Northern or with a demand for a substantial rental fee, as in Iowa, is a step hard for one to characterize calmly.

MAY END BADLY.

The Superior-Duluth inspection row is unfortunate for many reasons, but chiefly because it is a personal matter, so to say, that does not in the least go to the merits of the inspection system at all. Just where it will end, of course no one is safe in predicting, but this can be said, that the row may result in some unexpected developments. For instance, the attorney-general of Wisconsin has announced that he will bring action against the Great Northern road to show that it has no right to discontinue the maintenance of its elevators as public warehouses and to force their reopening as such. In other words, issue will be joined on question, Are railways bound to provide grain elevators for the reception of grain tendered for transportation, just as they are to shelter merchandise similarly tendered? An affirmative decision might revolutionize the grain business. Then there is the question of "national inspection," which is being stimulated by this unseemly struggle.

THE HARROUN SENTENCE.

The Harroun case at St. Joseph, Mo., is but another example of the lameness of our American criminal law, or its enforcement. It is now about a year since Mr. Harroun uttered forged bills of lading and other grain documents that netted him in cash some hundreds of thousands of dollars. But because of the wealth at his command and the interests of creditors contingent on his personal freedom, he has been able to postpone his trial until only the other day and will postpone the beginning of his five-year penitentiary sentence for another year, or until the Supreme Court passes, not on the justice of his sentence, but upon a legal quibble as to the textual form of the indictment. In the meantime, so far as the moral effect of his punishment upon the community is concerned, it will matter little whether Mr. Harroun shall serve his sentence or not; all the world, save himself, his family, his lawyers and his creditors, will have already forgotten one of the most daring crimes the grain trade is familiar with ever occurred—a crime that at least twice since has been successfully imitated by petty swindlers. One has little patience with a crime like Mr. Harroun's, which a strong man could easily have avoided by a frank confession of his business difficulties to his bankers; but one has less patience with a sympathy that assists the forger to escape or causes the moral effect of his speedy punishment to be lost to the community.

FIRE PROTECTION.

Every great elevator fire has its aftermath of instruction in the art of prevention. So, while the mystery of the Santa Fé Elevator fire at Chicago may never be solved to the satisfaction of some, the cause is pretty easy to guess at, and Mr. Arnold, in his article on another page, points out a way in which in all probability the great destruction by fire might, in all probability have been prevented. Mr. Arnold goes further and points out certain weaknesses that are common to the preventive fire apparatus of large elevators and which is of such an ill-advised character as to defeat the very purpose it was designed for. Mr. Arnold is not a novice, making suggestions out of his inner consciousness, but he gives the reader advice that is the concrete sum of long years of practical experience in fire prevention and fire fighting, the greatest value of which is the simplicity and inexpensiveness of the more radical changes suggested. The latter, including the use of smaller fire hose connections to standpipes, and the use of calcium chloride for making a non-freezing brine for water barrels and outside fire tanks, must commend themselves to our country readers as means within easy reach to strengthen their defenses against fire.

THE OHIO METHOD.

The Ohio system for dealing with the railways, devised by the Ohio Shippers' Association and rendered successful by the conservative but firm direction of that Association's affairs, mainly by Secretary J. W. McCord, is one worthy of careful study. It is based fundamentally on the principle of mutuality in the relations of shippers and carriers; and both having conceded that principle as a basis for the adjustment of interests, it remained for their representatives only to work out the details.

Thereupon a reciprocal demurrage agreement was entered into that is just to both carriers and shippers and is enforced in the letter and spirit through the force of public opinion, as surely as if the agreements were on the statute book itself; and the agreement is, in fact, preferable to a statute because the contract is subject to revision from time to time by the parties thereto, without the intermeddling of shifty members of the legislature.

And now comes the announcement, hard on the heels of the establishment of a claims department by the Ohio Grain Dealers' Association, that the Ohio Shippers' Association and the carriers have gone still further and entered into another agreement to arbitrate all differences on questions of rates or discriminations. Like claims for losses, complaints of unreasonable rates, etc., will be taken up by the representatives of the shippers of the two said associations, who will treat directly with the representatives of the carriers, in order to settle the question on a basis of broad mutuality instead of merely on the personal point of view.

This, we believe, is the most signal triumph of the principle of arbitration yet brought to notice as a means and method of

making a business adjustment of questions of a serious and complicated character; but there is no reason to believe it will work out less satisfactorily than have the other contracts of the Ohio Shippers' Association entered into with the Ohio carriers.

AGAIN SPELT.

Our good friend of the Operative Miller is in great distress. He has learned that some of his people, millers, have been deceived into buying wheat with an admixture of spelt; whereupon he proceeded to charge grain dealers as a class with the deliberate purpose of pilfering from millers by selling them spelt for straight wheat and links us with the pilferers because we decline to "lead the grain man out of his evil ways."

We do decline; the miller ought to be able to take care of himself. If he doesn't know enough about wheat to tell it from spelt, and the Operative Miller has said he doesn't, he is likely to buy some spelt if he mills in Michigan, in some parts of which state spelt, sown originally for feed, has become mixed with the seed wheat to such an extent that it is now causing millers some discomfort. As for the rest of the country, there is very little complaint, because spelt is very little in evidence.

Our friend of the Operative Miller should teach his millers to rely on themselves, to learn how to identify spelt when they see it and to reject offers of grain containing it; and not tell them to demand this or that absurdity of the agricultural department or expect the newspaper press of the trade to make grain dealers or millers virtuous by preaching to them tommy rot.

PLUGGING CARS.

Occasionally the hay or grain inspector comes across a plugged car, and the shipper has a *mauvaise quatre heure* when he gets returns. Somewhat less easy to detect, perhaps, than hay, plugging grain is the more common, but it is nevertheless so generally unsuccessful that only the fool or the incorrigible knave now attempts the swindle. With hay deception is practically impossible, and the penalty is so serious that even a knave in his sober senses rarely fails to notify his consignee what the car contains. Here certainly "honesty is the best policy."

Shippers should exercise a great deal of care in loading cars. If you have a few bales of low-grade hay and feel inclined to put it in one end of a car of timothy, don't do it unless it is absolutely necessary. Plugged cars are like stray, mangy curs—nobody wants to handle them. Where it is necessary, once in a while, to load a small quantity of off-grade hay with good hay, be sure to so advise your commission man to that effect. If he doesn't know it is there, he may have to resell the car a number of times; and the price secured in any market for hay that must be resold is never as high as the first sale would be on exactly the same car of hay. If he does know what the car contains he can sell it on that basis in the first instance.

EDITORIAL MENTION

Put all your contracts in writing: they will explain themselves.

Superior and Duluth may wake up to find Senator McComber shaking them both with a bill for national grain inspection.

Earn the premium the track-bidder ought to give you by conditioning your grain and then consigning it to be sold on its merits.

The car famine has renewed interest in the reciprocal demurrage laws, whose operation will be watched this winter with increased concern.

Do you know how much moisture the corn you are handling contains; and that all over about 13 per cent is a dangerous excess in non-freezing weather?

Car famine—hay scarce and high; blockade lifts—hay glutting the market and cheap. And of course the shipper realizes only when the blockade is off.

There is no better evidence that the grain business is a paying one than that presented by the large number of grain elevators that have been built during the past summer and fall.

The Minnesota Railroad Commission has sat down on the switching charge on the Loftus-Hubbard Elevator Co.'s complaint. Nothing like going after a "graft" vigorously.

Mr. Kress makes the timely suggestion that if shippers would study the grades of the markets they ship to they would save themselves much disappointment and some money, no doubt.

The Erie canal has benefited somewhat this season in tonnage and prices from the glut of grain at Buffalo; but as a means of relief from blockades the canal cannot be depended upon until the 1,000-ton barge channel shall have been completed.

The threat of the Oklahoma grain dealers and millers to apply the new reciprocal demurrage law to the car situation in the territory has been sufficient to wake up the carriers, which during the past three weeks have brought cars from the East and done much to lift the blockade.

The Southern wing of the National Association still hangs fire in the organizing, though "there is hope." The experience of the past in organizing the Southern trade is not encouraging, but Mr. Courcier has had experience down there, and if he says there's a chance there ought to be. Let us hope he will not be disappointed, but all the same

one must admit that the Southeastern trade problem is a "corker" to solve.

Men who crib new corn now must look to it that the cribs are well ventilated from top to floor, or they will see their men shoveling a deal of rotten corn out of those cribs next spring.

If you want to sell out, sell or buy second-hand machinery, want to buy hay, grain or seeds, advertise in the "American Elevator and Grain Trade" and get what you want quickly.

It is a rather notable fact that grain thieves in the railroad yards are so generally boys and youths. This is true from Portland, Me., to Superior. It is evident that leniency in the way of police warnings is lost on these young gentry, who should be more heroically dealt with.

Judging from the crop returns thus far in for 1905, the United States will again become one of the "World's Feeders"—a part in the universal economy which knowing writers and prophets less than a year ago said we never could play again. Even Jones was guilty. Such is prognostication!

It won't need pictures to make plain the plan of the model country elevator described by "Observer." The article is comprehensive enough to serve as a textbook of good planning and construction, and as such is worth preservation by all who contemplate new houses or the remodeling of old ones.

Secretary Strong of the Illinois Association has published a new list of regular Illinois dealers. He tells us it is not entirely satisfactory to him, but is "the best possible under the circumstances." But Mr. Strong is too modest, for the book seems to be as well prepared as that of any of his predecessors or contemporaries, and appears better than many of them.

Every little while a report comes in of an employe caught in the belting of an elevator and seriously hurt. Such accidents are less frequent in elevators than in most other places where power is used, but that fact ought to be the stronger argument for the fencing of belts or other forms of power transmission wherever there is a possibility of danger.

The National Association has taken up arms against what receivers are beginning to term "that intolerable nuisance"—the overdraft. It is needless to say that no shipper who values his credit will deliberately make an overdraft, since it is notice of the most telling kind that the drawer needs watching. Just at this time, too, when delayed shipments are the rule and not the exception, when the effect of the car famine has already reached the banks and made money both tight and higher priced the shipper cannot be too careful in this respect. Occasional and inadvertent overdrafts are excusable, but receivers very

naturally are less likely to look upon them with leniency now than they might at times when conditions are different.

Germany seems to be ready to meet the United States half way in the making of a reciprocity treaty that shall be satisfactory to both countries. Unfortunately, our laws are such that considerable preliminary work in the way of their amendment would be necessary to enable us to meet the Germans with privileges they would expect to get.

Mr. Kress on page 243 quite pointedly states some objections by shippers to the oats inspection, and more specially to the "n. e. g." of Toledo which may well receive the attention of that market. There probably must be a general "dump" grade in every market, but if Mr. Kress' strictures are well taken the "dump" at Toledo is open to the objection that it is rather too wide for the entire safety of shippers.

The bag lending evil bobs up every once in a while at grain dealers' meetings like Banquo's ghost. Why a strong association which can accomplish so much good in other ways cannot get together on this practice and decide positively to stop it, would be hard for the man of average intelligence to reason out, were it not for the fact that there is no limit to human greed and the desire of a few to overreach their neighbors by practices that demoralize entire communities.

Among the many pamphlets brought out in response to the demand for information on the "Improved Methods of Corn Growing and Intense Cultivation" is one by J. B. Armstrong, of Shenandoah, Iowa, with the title as quoted. It is the work of a practical farmer of half a century's experience; and a brief examination convinces the writer that it is a work that merits a wide circulation among farmers who need scientific instruction that is couched in everyday language and is based on the needs of the average and not the fancy farmer.

The scale report to Secretary Wells of the Iowa Association's expert, on the basis of 500 individual examinations, establishes three important general facts, to wit: That very few persons have the least technical knowledge of the construction and operation of scales; that there are too many scales having poor foundations with which it is impossible to maintain permanent perfect weighing conditions; that scale operators are careless and allow temporary causes to interfere with the perfect operation of the mechanical parts of the scales. These generalizations will not be news to scale experts, perhaps, but they should bring home to grain buyers the imperative necessity of having their own scales examined frequently by an expert. There are so many causes for imperfect weighing (this expert enumerates no less than 18 that require an expert's services to correct and 21 that the operator should himself be able to detect) that only the utmost vigilance will prevent variations from a truth

that may cause loss to the buyer sufficient to be serious, or create dissatisfaction among his trade if the loss should be the other way.

The only way to stop the production of mixed and otherwise objectionable grain for which there is no profitable market is to cease buying it except for what it is worth. Dealers have stopped growing black oats in this way, for in many parts of the corn belt where this variety formerly was commonly grown it has been given up by the farmers because they could not get full price for it.

The death of Mrs. J. W. McCord of Columbus, Ohio, on October 13, brought to his friends a distressing sense of the great loss sustained by her husband, who is so well known to the grain trade of the country. This loss was magnified by its unexpected suddenness, following as it did an operation that seemingly would be of a simple character. The expression of one's feelings under such circumstances is difficult if not impossible, but Mr. McCord will understand that the feeling of his friends is one of deep regret for his misfortune.

The new Baltimore Chamber of Commerce is nearly completed and it is expected the membership will formally move into its new quarters on or soon after the fifteenth of this month. The old Chamber was destroyed in the great fire in February, 1904, and the members have been transacting business in temporary exchange quarters fitted up in the Masonic Temple, while most of the firms have had temporary offices in flat buildings and been compelled to resort to many expedients to tide them over until the completion of the new Chamber. The Baltimoreans are therefore ready to receive congratulations.

One doesn't quite understand why "kiln dried" corn should be permitted to grade no higher than No. 3 in Mr. Cowen's new rules. Ought it not to be graded on its merits? Dried corn is better corn than corn not dried, provided of course it has not been baked, which fact may readily be ascertained by close inspection. The experts, of course, have the floor on the question; but the efforts of the trade to improve the general keeping quality of corn by drying it scientifically ought not to be black-eyed on the start by rules confining the dried grain to No. 3 as its possible maximum grade. It ought to have a fair chance.

It is remarkable that the impetus to grain elevator building does not bring out more new machines and methods of handling grain. We are informed on this point, however, by a large machinery house that grain is now handled as economically as it is possible, perhaps, to do it, and that present machines are so perfectly adapted for the work that they cannot readily be improved upon. This without doubt is a good thing for the elevator owner, for when he builds a house right and equips it as it should be furnished, he can do so with the assurance that his machinery will not be out of date in a year or two or that the man who builds a new house near him

will be able to handle grain more economically than himself. The rival may put more machinery into his house, but not better.

The N. Y., N. H. & H. R. R. has been ignoring quite pointedly certain claims made by Ohio grain dealers. These Eastern fellows have their own ideas of how things west of the Alleghenies ought to be managed. But a Columbus man says that next time a N. Y., N. H. & H. car rolls into Cleveland the Ohio Grain Dealers' Association claim bureau proposes to make a levy, and then let the courts decide whether the Eastern way is the Ohio way of settling claims.

Cincinnati has followed in the wake of other terminal markets, and on December 1 the directors of the Chamber of Commerce will inaugurate a new system of weighing grain and hay arriving in that market, for which the Chamber of Commerce will be responsible. The present system has been more or less unsatisfactory to shippers to Cincinnati for some time; and the rates proposed by the directors (present schedule) are high for the service compared with other markets; but shippers will not complain so much of that if the service shall prove satisfactory, as there is reason to believe, of course, that it will, especially as the directors promise to reduce the charges as soon as the income of the department warrants a reduction.

C. F. Staples, one of the Warehouse Commissioners of Minnesota, has a queer plan for ending car famines. The state law provides that warehouse charges must be paid until a car is furnished to move the grain, so the burden falls on the owner of the grain, and a warehouse receipt is not desirable paper. Mr. Staples proposes to so amend the law that when the receipts are tendered to the storage elevator the charges shall cease. In other words, the farmer will be given the option at will to "soak" the elevator whose effort to get a car for removal of grain may be quite as fruitless as that of the farmer himself. Mr. Staples will not be able to convince himself without effort that farmers generally are so grossly unfair as all that comes to.

Duluth remarks that Superior mills are having a hard time to operate "because of the pernicious activity of the Wisconsin inspection and weighing force." Is not this statement a bit twisted? The man who has been looking on has begun to suspect that it is the "pernicious activity" of Duluth that has created the disturbance at Superior. If it is proper for Minnesota inspectors to inspect grain in Minnesota, and Illinois inspectors in Illinois, why is it not also proper for Wisconsin inspectors to inspect in Wisconsin? But Duluth steps in here and says to the mills, for example, If you accept and grind any wheat inspected and weighed by the Wisconsin force, you shall not be allowed hereafter to buy an ounce of wheat in Duluth should it happen that you should be obliged to do so to keep running. In other words, Duluth swings a sandbag at the heads of Superior mills to force them to defy the state law of Wisconsin or

go out of business. Of course, the "perniciousness" of this course of action depends upon the point of view.

The Canadian law on the disposal of screenings is very severe on account of noxious seeds. In this country wheat screenings are fed, noxious seeds and all. But the Canadians do not permit such a menace to their farms; and the authorities of Manitoba even went as far on one occasion as to summon the Crown Grain Co. of St. Boniface for infraction of the act, the company having shipped two carloads of screenings to sheep feeders at Minneapolis. The magistrate fined the company \$25.

When cars are as scarce as they are now every effort ought to be made by all interested to load and unload as quickly as possible. Yet it is surprising how selfishly some shippers and receivers act in this regard. A Pittsburg railroad man says that shippers in that city are known to be "yelling for cars" who at the same time keep on paying demurrage to hold cars in their own yards for their own convenience; and he adds that about 50 per cent more cars could be had every day if shippers would do their share to keep equipment in motion. This is a sharp indictment, which, it is pleasant to record, is made of manufacturers and not of grain or hay shippers; but that fact need not weaken the force of the suggestion to the latter not to imitate a bad example.

Most of the terminal hay markets in the country are not blessed with "terminal hay warehouses" and hay is sold on its appearance as seen at the car door. If the car does not run even, the balance of the hay remaining after that in the doorway is taken out is resold—always at a cut price. New York, Baltimore and New Orleans are well equipped with warehouses and practically all the hay received at these points is unloaded into the warehouses by the railroad companies and piled each car separately in such manner as to permit a prospective buyer to see almost every bale in the pile. A few low-grade bales in a consignment to any of these three markets would be seen by the purchaser and the reselling of hay once sold under these conditions rarely if ever happens. In all markets where hay is sold by "car door sample," the disadvantage of the system and the great advantage and actual need of warehouse facilities is apparent. The warehouse is one of the pressing reforms needed in each of our great hay markets. Logically the railroad companies which haul the hay to market should supply them, but they evince a general disinclination to do so. In Chicago the hay receivers have organized, therefore, a company with a capitalization of \$50,000 and opened negotiations with one of the principal roads entering Chicago, with the object in view of having it co-operate with the hay trade organization in the construction and maintenance of a hay warehouse. It is believed that if one road puts up a warehouse the other receiving roads will follow suit, and that other markets will eventually follow this lead.

TRADE NOTES

A report states that the Iowa Grain & Manufacturing Company of Odebolt, Iowa, will dissolve.

It is stated that the Link Belt Supply Company of Minneapolis will shortly begin the erection of a three-story machine shop.

The American Grain Drying Company, a New Jersey corporation with registered office at Jersey City, has filed a certificate of dissolution.

Alexander & Crouch, dealers in machinery, gas and gasoline engines, Chicago, have dissolved partnership. Mr. Crouch will continue in the same line at a new location.

The Barnett & Record Company have the contract for the construction of the new C., B. & Q. Railroad Elevator at Kansas City, Mo.; capacity, 1,000,000 bushels. Work will be commenced at once and the elevator is to be completed by July 1, 1906.

Bulletin No. 10, just issued by the Jeffrey Manufacturing Company of Columbus, Ohio, is devoted to electric mine locomotives. It is a handsome book of 68 pages and illustrates the various types of locomotives made by the Jeffrey company for mine work.

Business continues very good with B. S. Constant Company of Bloomington, Ill. They are receiving second orders for United States Corn Shellers from original purchasers, and consider this proof positive that the machines are giving satisfaction.

The J. L. Owens Company of Minneapolis, Minn., manufacturers of the "Owens" Grain Cleaners, have opened a salesroom and storage warehouse in a building about three blocks from the main plant and situated along the St. Paul & Minneapolis Interurban Electric line. The additional room has been needed for some time, as orders for cleaners have been large, and additional space will now be secured at the factory for increased output.

A glance through the large plant of Nordyke & Marmon Company, Indianapolis, Ind., shows its 600 or more employes very busy at work on present contracts. In order to secure needed room the company has now under way a new foundry building, 104½x340 feet. The roof is of saw tooth construction and the entire building is modern and light. To secure the latter characteristic it might be stated that there are 16,000 panes of glass used in its construction.

The Marseilles Manufacturing Company of Marseilles, Ill., have a flattering testimonial from J. Z. Keel, of Keel & Son, Gainesville, Texas, relative to a New Process Shuck Sheller which was recently installed at Keel & Son's elevator at Lindsay, I. T. Mr. Keel is one of the oldest grain dealers in the state and is buyer and shipper of grain at a large number of railroad stations in Texas, Oklahoma and Indian Territory. His endorsement of the New Process, therefore, bears the weight of experience.

The 10,000-barrel flour mill now under construction by the Hecker-Jones-Jewell Milling Co., in New York City, will be the largest single mill in America, and no expense is being spared to make this mill, when complete, a model plant in every detail. The equipment of the mill is being very carefully selected, with a view to securing machines adapted to the work required of them and having the highest possible degree of efficiency and durability. One of the first of the machinery contracts to be let was given to the S. Howes Co., Silver Creek, N. Y., covering the entire requirements for the grain cleaning machinery and flour, bran and feed packers. This was the largest individual order ever given at one time for this class of machinery, comprising in all about ninety machines. The grain cleaning plant forms a most complete and thorough system, including large "Eureka" Steel Re-

ceiving Separators, which will be located in the elevator, improved "Eureka" Counterbalanced Milling Separators and Scourers, together with a large "Eureka" Wheat Washing, Drying and Conditioning System. All of these machines will necessarily be of large capacity, and being a product of the "Eureka" Works will, without question, be one of the finest lines of grain cleaning machinery ever produced. To handle the finished product from this great mill will require over fifty packers. The "Iron King" friction-driven packers will be used exclusively for packing the bran and feed and the well-known "Howes" friction flour packers for packing the flour into barrels and sacks. The S. Howes Co. are justly proud of their success in securing so large and complete an order.

A PLOWING MATCH.

The annual "plowing match" at the famous Funk Brothers' Seed Farm, near Bloomington, was this season as much an event as ever, and probably 1,000 people were at Shirley to witness the contest. These annual plowing contests are not merely tests of horses' or men's or plows' ability to turn over so much soil in a given period of time, but are contests of skill in scientific plowing under the observation of hundreds of men who are experts in the art and science and are a part of the modern education of farmers to be good farmers—the kind of owners or tenants who can pay current interest or rent on \$100 to \$140 land and still get rich on the profits of farming.

Fred R. Crane, head of the farm mechanics department of the Illinois College of Agriculture, was in charge of the several events. He brought a number of his students with him and one student was put on each judging committee. Ira L. Ham, Mr. Crane's assistant, acted as field manager.

The contests were for men with gang plows, three prizes of \$20, \$10 and \$5; for men with sulky plow, same prizes; for men with disk plow, prizes of \$10, \$5 and \$5; and for boys under 17 years of age on sulky plow, prizes of \$10 and \$5. There was also an exhibition of the work of steam plows—engines with gangs of ten plows and of ten disk plows turning over ground in widths of twenty feet at a single round.

WALLA WALLA WHEAT.

The Washington State Grain Commission has declined, at least for the present, to change the name of the grade of Walla Walla wheat now graded as "blue stem red mixed" to "blue stem." Grain buyers are docking this wheat from 1 to 2 cents per bushel on the ground that it is deficient in gluten. The wheat which is the subject of controversy is a peculiar red, resembling blue stem in everything save color. It was introduced from Australia about eight years ago and is now raised in all the great cereal district tributary to Walla Walla. The farmers and big grain growers there unite in declaring it the equal of any blue stem wheat grown, but nevertheless, in the face of their protests, they are docked for all blue stem containing 10 per cent or more of the red, under the Washington standard, instead of the 5 per cent prescribed by the Portland Chamber of Commerce grade. Of course, the farmers object, and that being so the Grain Commission refused to make any change in the title of the grade, which would seem to warrant or justify the dockage. In regard to the gluten test, the Commission says:

In order to secure a reliable, accurate, unbiased detailed knowledge of the relative value of this Walla Walla blue stem and its characteristic red, the chief deputy of the State Inspection Department, and one of the commissioners, separated by hand picking the blue stem from the red; placed each in separate covers with no type name or classification save the blue stem was marked No. 1

and the red No. 2, and sent them to the State College of Washington at Pullman, requesting that its chemist analyze them. The chemist, Mr. R. W. Thatcher, reported the analysis to be as follows:

	Sample No. 1 Pct.	No. 2 Pct.
Moisture	11.12	10.71
Ash	2.31	1.70
Crude protein	11.38	12.07
Carbohydrates, oils, etc.....	75.19	75.52
	100	100

Thus in every detail it was found that this red (No. 2) was more valuable than the blue stem (No. 1). The red had less "moisture," which is waste; less "ash," which is the lowest item of value in wheat; more "crude protein," i. e., gluten, and a mere trifle more of "carbohydrates" (sugar, starches), "oils, etc."

Nevertheless the Commission recommend to farmers to use pure blue stem seed. "You are making a mistake," they say, "in not obtaining and growing unmixed wheat. No matter what the relative value of the red or the white, some buyers will always have a prejudice or preference for wheat which is unmixed."

WILL ARBITRATE RATES IN OHIO.

The announcement was made from Columbus, Ohio, on the authority of J. W. McCord, secretary of the Ohio Shippers' Association, that the Ohio railroad managers and the Ohio Shippers' Association have come to an agreement which, it is thought, will settle for good any friction which may in the future arise through an allegation against the roads of discrimination. The details have not been worked out in full, but the primary step will be to appoint a joint committee—three men to represent the Shippers' Association and three men to represent the railroads. All complaints as to rates, instead of being taken by an individual shipper to an individual railroad, will be sent to the Shippers' Association to be referred to the joint committee for settlement. The arrangement is, in effect, an agreement to arbitrate all questions by representatives of those interested.

The parties to this agreement have at present a similar joint committee which settles disputes as to the movement of cars. It is looked on throughout the country as a model settlement of the demurrage problem, and hundreds of letters of shippers all through the country have been answered explaining its workings.

"Speculation in grain is not a fine art," says E. W. Wagner in a suggestive booklet bearing that title. In which grain differs from stocks, as speculation is on the New York Stock Exchange, where values have but little influence on daily prices, which are made upon tendencies, the state of the money market and unforeseen personal influences, and rarely by quantity or, as in grain, the consumptive demand that must continue so long as men and animals eat. On the contrary, true speculation in grain is as little a gamble as is the "speculation" that consists in the purchase of a stock of dry goods or groceries; it is, as Mr. Wagner says, "simple, broad common sense, applied deductively for the reasoning out of chances for profit by buying or selling staple commodities. Its basis is an existing condition of great plentitude, or moderate supply, or positive scarcity of such articles, measured to meet periods of urgent necessity, normal demand or surfeit of offerings. Fitting these together to ascertain the most likely result calls more for common sense than fine art." Taking this thought as his text, Mr. Wagner's booklet becomes an interesting, as well as rational, defense for common sense speculation in grain, as a legitimate form of business, and the parallelism between such speculation, so called, and merchandising is well sustained throughout. The suggestions and explanations necessary to understand this form of business are clearly elucidated. The booklet, which is well worth reading, will be sent on application to the author at 99 Board of Trade Building, Chicago.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of October, 1905:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	520,058	318,125	168,000	.....
Corn, bushels.....	517,190	105,115	303,847	3,650
Oats, bushels.....	2,283,524	328,834	1,397,293	655
Barley, bushels.....	729	16,996	.....	.....
Rye, bushels.....	195,114	169,321	77,142	.....
Timothy Seed, lbs.....	12,041	13,851	.....	5,397
Clover Seed, lbs.....	4,398	2,513	.....	5,350
Hay, tons.....	6,712	4,641	2,040	1,811
Flour, bbls.....	319,770	156,370	218,500	41,848

BOSTON—Reported by Daniel D. Morss, acting secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Flour, bbls.....	214,968	196,004	70,120	58,342
Wheat, bushels.....	1,172,809	4,504	813,054	86,077
Corn, bushels.....	369,234	324,824	475,712	121,026
Oats, bushels.....	753,210	557,986	206,099	8,410
Rye, bushels.....	4,390	4,495	.....	.....
Barley, bushels.....	329,105	29,440	216,307	24,233
Flaxseed, bushels.....	4,562	550	.....	.....
Mill Feed, tons.....	1,101	2,066	73	180
Cornmeal, bbls.....	4,407	5,552	1,660	2,790
Oatmeal, bbls.....	11,582	9,177	2,720	312
Oatmeal, sacks.....	9,220	13,260	23,204	17,839
Hay, tons.....	18,570	10,450	2,942	.....

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	21,385,736	14,911,143	609,948	.....
Corn, bushels.....	31,198,110	23,730,767	113,005	.....
Oats, bushels.....	21,852,786	13,361,998	1,238,130	.....
Barley, bushels.....	8,475,052	7,241,236	691,760	.....
Rye, bushels.....	519,465	800,653	59,900	.....
Timothy Seed, lbs.....	.....	.....	.....	.....
Clover Seed, lbs.....	.....	.....	.....	.....
Other Grass Seed, lbs.....	.....	.....	.....	.....
Flax Seed, lbs.....	1,891,625	1,203,000	.....	.....
Broom Corn, lbs.....	.....	.....	.....	.....
Hay, tons.....	.....	.....	.....	.....
Flour, bbls.....	6,946,407	3,941,794	.....	.....

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	3,160,880	3,735,615	782,987	2,302,733
Corn, bushels.....	5,031,238	3,488,400	6,194,074	5,812,532
Oats, bushels.....	14,012,888	5,999,705	8,413,229	5,366,131
Barley, bushels.....	4,855,600	4,364,309	1,312,899	994,765
Rye, bushels.....	434,180	264,770	189,027	148,465
Timothy Seed, lbs.....	9,026,897	10,392,718	1,084,911	2,570,979
Clover Seed, lbs.....	1,706,000	1,039,596	154,098	768,868
Other Grass Seed, lbs.....	3,097,416	1,536,170	3,321,848	1,868,651
Flax Seed, bushels.....	342,220	475,279	8,360	48,459
Broom Corn, lbs.....	4,357,265	1,681,415	1,055,346	708,632
Hay, tons.....	14,498	21,870	956	741
Flour, bbls.....	921,476	744,651	1,052,306	575,121

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	385,394	257,194	324,272	118,727
Corn, bushels.....	409,416	318,874	146,026	242,271
Oats, bushels.....	904,554	495,194	690,805	221,991
Barley, bushels.....	135,060	235,312	193	1,184
Rye, bushels.....	58,358	59,892	4,458	7,981
Timothy Seed, bags.....	4,986	9,887	2,699	5,138
Clover Seed, bags.....	2,896	3,449	420	2,094
Other Grass Seed, bags.....	13,950	11,366	12,458	7,291
Flax Seed, bushels.....	.....	.....	.....	.....
Broom Corn, lbs.....	.....	.....	.....	.....
Hay, tons.....	12,728	9,446	6,808	3,825
Flour, bbls.....	150,693	159,585	88,120	98,603

CLEVELAND—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	99,428	121,893	104,197	25,460
Corn, bushels.....	406,603	332,173	251,020	254,414
Oats, bushels.....	1,639,505	603,368	434,244	383,530
Barley, bushels.....	10,165	41,718	.....	.....
Rye, bu. and other cereals	750	.....	.....	2,178
Flaxseed, bushels.....	.....	.....	.....	.....
Hay, tons.....	3,822	6,406	981	1,204
Flour, tons.....	6,784	8,627	2,568	3,073

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	395,364	541,238	77,673	32,189
Corn, bushels.....	598,231	385,514	74,575	114,020
Oats, bushels.....	339,627	329,218	92,127	183,355
Barley, bushels.....	650,591	401,747	920	960
Rye, bushels.....	122,719	20,781	66,400	54,067
Flour, bbls.....	38,100	29,600	15,000	18,400

DULUTH—Reported by H. B. Moore, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	8,345,270	6,867,453	6,557,863	4,758,532
Corn, bushels.....	32,196	.....	35,420	.....
Oats, bushels.....	2,443,336	3,218,679	661,575	1,760,243
Barley, bushels.....	3,066,353	2,952,114	3,546,543	3,050,442
Rye, bushels.....	153,917	242,078	121,448	258,157
Flax Seed, bushels.....	3,612,620	2,268,427	2,754,808	1,487,281
Flour, bbls.....	943,120	871,675	873,610	771,850

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	5,636,060	3,388,700	3,324,000	2,684,700
Corn, bushels.....	1,383,000	752,400	933,000	585,000
Oats, bushels.....	607,500	716,400	496,500	406,800
Barley, bushels.....	197,000	60,000	143,000	21,000
Rye, bushels.....	54,000	20,000	35,000	19,200
Bran, tons.....	.....	570	4,590	5,715
Flax Seed, bushels.....	.....	800	.....	.....
Hay, tons.....	12,910	13,310	2,140	2,990
Flour, bbls.....	.....	.....	162,000	133,400

MILWAUKEE—Reported by Wm. J. Langson, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,262,260	1,625,754	336,420	309,106
Corn, bushels.....	109,250	101,650	91,671	58,440
Oats, bushels.....	1,360,200	750,100	869,041	486,766
Barley, bushels.....	3,809,800	3,234,750	2,420,526	2,883,441
Rye, bushels.....	177,600	228,000	29,000	151,000
Timothy Seed, lbs.....	269,091	607,015	118,000	998,530
Clover Seed, lbs.....	528,940	616,865	32,000	197,955
Flax Seed, bushels.....	48,700	33,300	.....	.....
Hay, tons.....	2,040	2,123	.....	.....
Flour, bbls.....	467,670	348,400	484,527	418,570
Feed, tons.....	.....	.....	.....	.....

GALVESTON—Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	616,320	.....
Corn, bushels.....	117,186	25,714
Rye, bushels.....

MINNEAPOLIS—Reported by L. T. Jamme, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	13,665,090	14,276,210	2,206,150	2,377,910
Corn, bushels.....	131,390	66,380	25,610	20,640
Oats, bushels.....	4,453,160	3,512,880	1,267,160	680,630
Barley, bushels.....	2,470,170	2,018,610	1,251,550	1,088,500
Rye, bushels.....	299,300	371,720	173,060	133,250
Flax Seed, bushels.....	1,944,130	1,717,510	468,910	416,520
Hay, tons.....	2,810	2,521	90	122
Flour, bbls.....	24,287	24,921	2,054,277	1,385,615

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	3,018,257	759,513	1,699,902	129,526
Corn, bushels.....	229,271	676,289	294,788	1,106,244
Oats, bushels.....	507,124	316,423	451,458	276,536
Barley, bushels.....	537,540	270,639	709,037	151,066
Rye, bushels.....	.....	.....	.....	.....
Flaxseed, bushels.....	96,500	772	.....	.....
Flour, barrels.....	146,851	105,565	259,835	244,365

NEW ORLEANS—Reported by Fred Muller, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	115,000	.....	219,000	2,000
Corn, bushels.....	370,000	82,000	201,061	48,456
Oats, bushels.....	226,500	91,000	181,990	3,165
Barley, bushels.....	18,000	.....	.....	.....
Rough rice.....	132,883	.....	.....	.....
Clean rice pockets.....	46,463	.....	104,700	.....
Hay.....	.....	.....	.....	.....
Flour, bbls.....	.....	47,380	101,671	28,052

OMAHA—Reported by A. H. Merchant, secretary of the Grain Exchange.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,397,000	608,000	1,125,600	400,000
Corn, bushels.....	530,000	209,000	809,600	290,000
Oats, bushels.....	1,465,500	713,500	931,500	535,000
Barley, bushels.....	42,000	35,500	27,000	36,000
Rye, bushels.....	40,000	63,000	27,000	65,000

PEORIA—Reported by R. C. Grier, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	81,830	84,800	48,800	76,900
Corn, bushels.....	1,612,000	1,616,000	640,000	291,600
Oats, bushels.....	1,292,200	1,097,200	1,412,600	1,324,800
Barley, bushels.....	422,800	511,700	308,700	302,800
Rye, bushels.....	44,000	32,800	12,800	9,800
Mill Feed, tons.....	675	945	3,993	4,649
Spirits and Liquors, bbls.....	.....	.....	.....	.....
Syrups and Glucose, bbls.....	.....	.....	.....	.....
Seeds, lbs.....	60,000	300,000	60,000	90,000
Broom Corn, lbs.....	180,000	420,000	323,900	536,000
Hay, tons.....	3,750	6,620	650	880
Flour, bbls.....	118,500	154,700	125,700	144,820

PHILADELPHIA—Reported by Charles F. Saunders, secretary of the Commercial Exchange.

Wheat, bushels.....	354,663	84,039	128,000	
Corn, bushels.....	473,323	143,038	307,882	120,114
Oats, bushels.....	1,711,152	305,894	510,000	32,174
Barley, bushels.....	41,200	81,600		
Rye, bushels.....	16,000	8,800		
Timothy Seed, bags.....	1,433	1,100		
Clover Seed, bags.....	576	345		
Flax Seed, bushels.....	45,600	24,800		
Hay, tons.....	8,760	10,140		
Flour, bbls.....	308,513	168,858	123,911	64,191

ELEVATOR AND GRAIN NEWS

ILLINOIS.

T. E. Kelly has sold out his grain business at Galva, Ill.

Firey Bros. have succeeded Firey Bros. & Turner, grain dealers of Edinburg, Ill.

Van Hook Bros. recently purchased the new grain elevator of Apland Bros. at Elliott, Ill.

A. E. Rodenberk has succeeded C. Van Carpen & Co. in the grain business at Hartsburg, Ill.

O'Hara, Boldridge & Co. have sold their interest in the elevator at Congerville, Ill., to Mr. Rich of Danvers.

Mr. Carlisle of Adrian, Ill., has leased the farmers' elevator at Ferris, Ill., and is buying grain at that place.

Tobey & Son are building an addition on their elevator at Bird's Bridge, Ill., to handle the large crops which have been raised in that vicinity.

Philips & Shively have sold their grain elevator at Gibson, Ill., to George Walker. The new owner took possession of the property on November 1.

Madden Bros. of Thawville have purchased the grain elevator at Ridgeville. The members of the firm are Geo. W. Madden, C. M. and J. C. Madden.

The Burrell Engineering & Construction Co. of Chicago, Ill., has purchased two improved Hall Distributors of the Hall Distributor Co., Omaha, Neb.

W. A. Williamson has purchased the grain elevator and business of Felger Brothers at Saunemin, Ill. Felger Bros. have moved to Milmine, near Bement.

The copartnership existing between Z. K. Wood and J. M. Kautz under the firm name of Wood & Kautz at Mt. Pulaski, Ill., was dissolved by mutual consent on October 25.

E. B. Fidler & Co. of Sullivan, Ill., are building a new grain elevator on the east side of the Wabash Railroad at the new town of Kirkton, between Windsor and Bruce, Ill.

The Farmers' Elevator Co. of Virden, Ill., has been incorporated, with a capital stock of \$8,000, to deal in farm products. The incorporators are H. A. Campbell, D. C. Van Eman and I. D. Filburn.

Hopwood Bros. are building a new grain elevator at Hopwood Station, a new town on the Frisco cut-off, eleven miles from Hoopeston, Ill. The capacity of the new elevator is 50,000 bushels.

The Latham Farmers' Grain Company has enlarged the capacity of its grain elevator at Latham, Ill., by the addition of a 5,000 bushels storage on the cupola. They have also added some new machinery.

The National Elevator Company has sold its grain elevator at Camargo, Ill., to Harry Kaga, who operates the other elevator at that place. He will tear the elevator down, leaving the town with but one house.

The announcement was made early in November that Suffern, Hunt & Co. had sold their corn mills at Decatur, Ill., to the American Hominy Co. of Indianapolis, Ind. The consideration was reported at \$400,000.

The Bush Grain Co. of Springfield, Ill., has been organized, with a capital stock of \$10,000, to do a grain brokerage and commission business. The incorporators are Charles D. Bush, George A. Diehl, Arthur J. Williams.

The new grain elevator which the Cleveland Grain Company is building at Bloomington, Ill., is expected to be completed by December 1. There will be eight tanks, each 25 feet in diameter, with a total capacity of 200,000 bushels of grain.

The Santa Fe Railroad has adopted plans for rebuilding its grain elevator at Chicago. The new house will have a capacity of 1,400,000 bushels of grain and will be built largely along the lines of the company's new house at Argentine, Kan.

Eugene Hayward, grain dealer of Cooksville, Ill., has had a section of his grain elevator taken down and in its stead he is building an addition, 22x29 feet, with a capacity of 60,000 bushels. This will give the elevator a total capacity of 120,000 bushels.

The Edinburg Farmers' Grain Co. of Edinburg, Ill., has filed articles of incorporation, with a capital stock of \$10,000, to deal in grain, lumber, coal and farming implements. The incorporators are G. B. Drennan, J. K. Alexander, J. W. Kem-

merer, M. R. Renner, Martin Whiteside and J. B. Brubeck.

H. A. Binns, grain dealer of Middletown, Ill., is adding to his storage capacity by erecting corn cribs on the east side of the railroad adjoining his elevator.

The grain elevator of C. A. Davis at Findley, Ill., was completed early in December. It is built on the site of the old Findley Elevator, which was burned a short time ago. When completed it is expected to be one of the best equipped houses in Central Illinois.

Articles of incorporation of the Bolivia Farmers' Grain Co. of Bolivia, Ill., have been filed with a capital stock of \$3,000, to deal in grain, coal, lumber and farming implements at Bolivia. The incorporators are John S. Baker, W. H. Lee, W. L. Igon and Melvin Spengler.

Replevin proceedings against 19,000 bushels of corn begun by the United Grain Company against the South Chicago Elevator Company, South Chicago, Ill., were recently dismissed by agreement. The elevator company held the grain, claiming a lien upon it for storage charges.

OHIO, INDIANA AND MICHIGAN.

E. C. Astley & Son have sold their grain elevator at Portland, Mich., to F. S. Lockwood.

The Pierce Elevator Co. has succeeded the Price Grain and Implement Co. at Union City, Ind.

The J. W. Neumann Co. of Howard City, Mich., completed a modern bean elevator in that city in October.

Ireton Bros. & Eickeuberry have sold their grain elevator at Delphos, Ohio, to Felger Bros. of De Graff, Ohio.

Perlie Finch, formerly of Jamestown, Ind., has sold his grain elevator at State Line, and is looking for a new location.

Niccum Bros. have completed arrangements for building a grain elevator in connection with their flour mill at Kimmell, Ind.

The Oakley Mill at Oakley, Mich., has been bought by A. L. Nichols of Owosso, who is converting it into a bean and grain elevator.

It is reported that a new grain elevator will be built at England Station, Ohio, on the A. & W. line. This will make the fifth elevator along that line.

Crawford Bros. have adopted additional fire protection at their elevator at Madison, Ind., consisting of a 6,500-gallon tank on the top of the house.

H. A. Myers of Plankton, Ohio, has purchased the grain elevator and hay warehouse at that point owned by Thompson & Sons. He took possession in October.

Richards & Evans have completed a new grain elevator at Cortland, Ohio. It is a large and thoroughly modern house and it is expected will do a large business.

The Middlebury Grain Co.'s new elevator at Middlebury, Ind., was completed and placed in operation the first part of November. Its cost was in the neighborhood of about \$3,500.

E. F. Sherman has bought the Grigsby & Stratton elevator and feed store at Allegan, Mich., and will conduct the business on the same lines on which it has been run in the past.

The grain elevator at Lockbourne, Ohio, owned by the O'Hara Estate, was sold recently to a Mr. Myers from the northern part of the state. He will take possession soon and operate it.

The Henderson & Coppock Grain Elevator at West Milton, Ohio, has been remodeled and equipped with new machinery. The capacity of the house has also been slightly increased.

Spangler Bros., whose grain elevator at North Defiance, Ohio, burned several weeks ago, commenced work on a new house to replace the old one in November. It will occupy the site of the old elevator and will have about the same capacity.

D. A. Baker of Butler, Ohio, has made a proposition to the business men of Fayette, Ohio, to build a large grain elevator at that place. A grain elevator is said to be badly needed, and it is thought that arrangements will be completed for building a house there.

The Iroquois Realty Co. of Coshocton, Ohio, has been organized with a capital stock of \$50,000. The officers are John Conley, president; Robert Porteus, vice-president; Joseph Porteus, secretary-treasurer and general manager. The company will erect a large grain elevator.

The Union Elevator at New Richmond, Ind., was recently sold by the receiver, Enoch F. Haywood, to John T. Detchon of New Richmond, for \$15,000. The company owning the elevator was organized by about fifty farmers a few years ago, and its affairs were in such a tangled condition about four

months ago that a receiver was appointed to straighten things out. Mr. Detchon will operate the elevator.

The Burch-Wyman Grain Co. has increased the capacity of its grain elevator at Clare, Mich., by an additional building holding 3,000 bushels. A part of the elevator is now equipped for a beanery with a capacity for 25 machines for hand pickers as well as a Giant Picker and a second gasoline engine for running the bean picking machines.

The R. J. Beals Elevator at Fairmont, Ind., has been purchased by a company composed of business men of North Manchester. The company included Edward Elliott, Elijah Elliott, C. T. Parker, Birney Smith and J. F. Ulreh. It will be known as the Fairmont Grain Co. and is capitalized at \$5,000. Elijah Elliott will manage the business.

The Geneva Milling Co. recently incorporated at Geneva, Ind., with a capital stock of \$15,000, to take over the mill at that place, is building a new grain elevator with a capacity of 20,000 bushels, which will be operated in connection with the mill. Large amounts of grain marketed at that town have made necessary the enlargement of their facilities.

The Berne Grain and Hay Co. of Berne, Ind., is making a number of improvements on their elevator at Decatur, Ind. Almost the entire building was renewed and a large equipment of new machinery was installed, including large dumps. The capacity for grain storage was also considerably increased, the new improvements costing between \$2,000 and \$3,000.

The Rockafellow Grain Co., Ltd., one of the leading firms of Carson City, Mich., now has a storage capacity of 44,000 bushels of grain. In addition, the company handles large quantities of beans and clover seed, and hand-picks an average of three cars of beans per week. The company has also elevators at Middleton, Sheridan and Vickeryville, Mich. L. W. Murray is manager of the business.

A new firm launched into the grain and hay shipping business is Baum & Robinson, who have offices in the Union National Bank Building, Columbus, Ohio. The members of the firm have had considerable experience in the grain business. H. L. Robinson, who manages the office, has been identified with the grain trade in and around Columbus for ten out of the past twelve years, and is known personally to a large number of farmers in that section of the state. T. W. Baum has been located at Duvall, Ohio, for eight years and operates a 40,000-bushel elevator at that station on the Norfolk & Western. He also is interested in the 40,000-bushel house at Groveport on the Hocking Valley, which is operated under the firm name of Baum & Herr. In addition to this Mr. Baum has one farm of 420 acres and another of 340 acres. The partnership agreement dates from September 20.

EASTERN.

W. L. Atwater has installed a new boiler in his elevator at Barker, N. Y.

Mark F. Evans has bought the grain and feed business of Sitzler & Glavin at Waterford, N. Y.

William F. Krick, grain dealer of Sinking Spring, Pa., has under construction a large grain elevator.

A. T. Butler, grain dealer of Adams, Mass., has erected a new building to increase his storage facilities.

C. F. Kimball & Son are building a new grain elevator at Salem, N. H. The building will be 50x30 feet.

S. E. & W. G. Brown, grain dealers of Hartford, Conn., have prepared plans for the erection of two new grain storage buildings.

Ewing Bros. have commenced work on the rebuilding of their grain warehouse which burned recently at Newton Hamilton, Pa.

C. L. Clock of Trumansburg, N. Y., has purchased a new 15-horsepower gas engine to run his grain elevator and mill at that place.

Ralph E. Cook, grain dealer of Wellfleet, Mass., recently filed a voluntary petition in bankruptcy. The liabilities were \$616, without assets.

L. C. Daniels is rebuilding his grain elevator at Hartford, Conn., which was burned about six weeks ago. It will have a capacity of about 30,000 bushels of grain.

Charles H. Plummer is building an addition on his grain elevator at East Jaffrey, N. H. A large increase in business is the cause of the improvement.

J. S. Robb writes us that he has sold his hay and grain business at Wellsboro, Pa., and has decided to go to Brunswick, Ga., to engage in the lumber business.

J. P. Adam and Monroe B. Adam of Perry Township, Pa., have leased the grain, coal and lumber business of F. F. Dreibelbis at Virginville, Pa., and will run the business under the firm name of J. P. Adam & Bro. The business was established in

1874 by Jacob Dreibelbis, and has grown to very large proportions.

A new addition has been completed on the plant of the Bedford Grain Co. of Bedford, Mass.

The Wiscasset Grain Co. has installed a new 35-horsepower gas engine to operate its elevator at Wiscasset, Me. Everything about the plant is now in first-class shape.

C. G. Brown is building a grain storage warehouse and mill at Readsboro, Vt. The business has been growing rapidly at that point and has made larger quarters necessary.

The Worcester Grain Co. of Worcester, Mass., has been organized with a capital stock of \$10,000. The stockholders are Edward A. Regan, Julia B. Jeffs, Walter M. Jeffs and John S. Carleson.

The Quaker City Milling Company of Philadelphia, Pa., is building eight steel grain tanks to provide for additional storage. They are 15 feet diameter inside and 85 feet high. The total capacity will be 150,000 bushels.

The Wood & Crabbe Grain Co. of Binghamton, N. Y., has been incorporated with a capital stock of \$50,000. The officers are Wade Wood, president; T. J. Pinckard, vice-president; B. F. Crabbe, secretary-treasurer. The company will carry on a general grain and feed business.

Justin A. Auert expects to have his new grain elevator at Deerfield, N. Y., completed by November 1. The building is 56x56 with basement, three stories high and of brick. The ground and third floor will be used for storage and the second floor for grain bins and elevator purposes.

Owing to the largely increased export business done from Philadelphia the Pennsylvania Railroad has opened its 1,250,000-bushel grain elevator at Girard Point, and will open the 1,000,000-bushel Girard Point elevator in November. Last April, owing to slack export business, one of the Girard Point elevators was closed down and the other elevator has been closed for two years. All the export grain consigned by way of the Pennsylvania Railroad has been handled through the 500,000-bushel Washington Street Elevator.

MISSOURI, KANSAS AND NEBRASKA.

H. L. Aden has exchanged his grain elevator at Raymond, Neb., for a farm.

The T. J. Kelley Grain Co. has discontinued its grain business at York, Neb.

C. J. Mullis has started work on the foundation for a new grain elevator near Dunbar, Neb.

The grain elevator at Cambridge, Neb., has been bought by Cooper & Linn of Humboldt.

Lanzreth & Greenheck of St. Marys, Kan., have been succeeded by the Hoffman Elevator Co.

The Nelson Grain Co. of Kansas City, Mo., has increased its capital stock from \$15,000 to \$30,000.

The foundation was started the first part of November on a new grain elevator at Wilber, Neb.

J. E. Dorsey will install two improved Hall Distributors in his grain elevator at Morse Bluffs, Neb.

F. J. Bohr has built an addition on his grain elevator at Milligan, Neb., to increase the capacity.

A. F. Jones, grain dealer of Pratt, Kan., has been succeeded by the Home Grain Co. of Kansas City, Mo.

H. F. Austin is building a new grain elevator at Denton, Neb. It will be a wood structure of medium capacity.

Cooper & Linn of Humboldt, Neb., have purchased the grain elevator at Violet, Neb., and took possession in October.

Charles Gross has purchased and is operating the grain elevator at Coy, Neb., formerly owned by Hull, Holst & Von Stade.

The Westbrook-Gibbons Grain Co. has installed an improved Hall Distributor in their grain elevator at Glenwood Park, Neb.

The Brighton Milling Co. of Brighton, Mo., has just completed a grain elevator which it will operate in connection with its mill.

A new grain elevator will be built at St. Louis, Mo., by the William J. Lemp Brewing Co. The estimated cost of the house is \$50,000.

Messrs. Kliver & Teichgraber, owners of the City Roller Mill at Emporia, Kan., have completed a large new steel elevator at the mill.

M. Chamberlain, who has been conducting a grain business at Beverly, Kan., has sold out to the Farmers' Elevator Co. of that place.

The construction of the first permanent building on the Great Northern right-of-way at Fremont, Neb., was begun by the breaking of ground for McCaull & Webster's new grain elevator on November 3. It will have a capacity of

20,000 bushels and will be completed by the middle of December.

A new grain elevator will be built at Joplin, Mo., by J. H. Hines and W. A. Kalf of Boynton, Mo. It will be of medium sized capacity.

Dyer Bros., who have been buying stock at Carleton, Neb., have erected a grain office for the purpose of buying grain at that place.

It is reported that a new elevator will be built at Irvington, Neb., by Chicago parties who were looking over the ground in October for a site.

The Crowell Lumber and Grain Co. of Creston, Neb., has made improvements about its plant, including the installation of a new wagon scale.

Work was commenced in October on the rebuilding of the Westbrook-Gibbons Elevator at Glenwood, Neb., which was recently destroyed by fire.

A new gasoline engine will be installed to take the place of the horsepower which has heretofore run the Central Granaries Elevator at Byron, Neb.

Ed Scoville has purchased recently two new grain elevators—one at Bruning and one at Belvidere, Neb. He expects to make his home at Bruning.

The Farmers' Elevator Co., composed of farmers of Nemaha County, Nebraska, has purchased the Coryell Elevator near the Pacific Depot at Auburn, Neb.

The Blue Hill Farmers' Grain & Stock Association of Blue Hill, Neb., has filed articles of incorporation with the secretary of state. The capital stock is \$25,000.

The elevator of the Farmers' Co-operative Elevator Co. at Arapahoe, Neb., has been completed and is said to be one of the largest structures of the kind in that part of Nebraska.

A considerable amount of new machinery has been installed in the grain elevator at Table Rock, Neb. After the new improvements are completed it will be an economically working, up-to-date house.

Nelson & Tipler have made arrangements to rebuild their grain elevator at Geuda Springs, Neb., which burned in October. The elevator will be an improvement over the old house and of a larger capacity.

The Crowell Grain Co. of Omaha, Neb., which secures all of its operating power from the Omaha Electric Light and Power Co. for its new elevator at Fourteenth and Ohio streets, has a contract calling for 250 horsepower.

The Pickrell Farmers' Elevator Co. at a recent meeting held at Pickrell, Neb., purchased the grain elevator at that point owned by the Nebraska Elevator Co. The company assumed charge of the plant the latter part of October.

G. H. Hudeburgh has applied for a site on the Burlington right-of-way for a new grain elevator at Herndon, Neb. The elevator, if built, will have a capacity of 20,000 bushels. The company which will own it is capitalized at \$5,000.

Fred Myers and W. J. Elliott have formed a partnership to engage in the grain business at Superior, Neb. Mr. Myers has been recently associated with Bossemeyer Brothers and Mr. Elliott is one of the established grain dealers of Superior.

The announcement is made that the Nye-Schneider-Fowler Co., with headquarters at Freemont, Neb., will build a 1,000,000-bushel grain elevator at Omaha at an early day. This will make the ninth elevator operating on the Omaha Grain Exchange and tributary to the city.

The McCall-Webster Elevator Co. of Minneapolis, Minn., have arranged to build a grain elevator at the new town the first station north of Lyons, Neb., now known as No. 5, on the Great Western Railway. Besides doing a general elevator business, the firm will establish coal sheds and a lumber yard at that point.

Merriam & Holmquist will derive the power to run their new elevator at Fifteenth and Manderson streets, Omaha, from the Omaha Electric Light and Power Co. An amount of 228 horsepower is to be supplied by the individual drive system. It is expected that the elevator will be completed by the last of December.

The Rock Island Elevator, which was successfully moved from Seventh Street and Kansas Avenue, Armourdale, Kan., to the corner of Mill and McAlpine streets, began operations late in October. Edward Townsend is the superintendent of the elevator, which has a capacity of 100,000 bushels. It is operated by electric motors.

The Trans-Mississippi Grain Co. of Omaha, Neb., has increased its grain storage by the purchase of two elevators which were owned by Joseph Conor. One is located at Creston, Neb., with a capacity of 25,000 bushels, and one is at Leigh, with a capacity of 15,000 bushels. The company has also recently bought a 15,000-bushel elevator at Platte

Center, Neb., of Ed Van Allen of that city. In addition, the company is building a 25,000-bushel grain elevator at Sargents Bluff, Iowa, erected to take the place of the smaller one recently torn down.

The Farmers' Independent Shipping Association has been organized at Wilcoxville, Neb., to conduct a general live stock, lumber and coal business. The authorized capital stock is \$5,000. The officers of the company are: G. C. Burns, president; L. W. Young, vice-president; G. B. Klingersmith, treasurer, and H. A. Anderson, secretary.

The Rea-Patterson Milling Co. of Coffeyville, Kan., has been making a number of changes in its grain elevator at Nowata, I. T. The old 12-horsepower gasoline engine is giving way to a 25-horsepower gas engine, and a new sheller and cleaner has been installed. Frank Hancock is in charge of the company's elevator and mill at that point.

MINNESOTA AND WISCONSIN.

The Woodworth Elevator Co. has closed its house at Westbury, Minn.

A new grain elevator was completed at Elkton, S. D., the last part of October.

The Columbia Elevator at Hector, Minn., is open, with H. W. Koenler in charge.

The M. & N. grain elevator at Georgetown, Minn., has been closed for the season for lack of grain.

The Imperial Elevator at Argyle, Minn., was closed the first part of November for the winter.

The Osborn & McMillan elevator at Brooks, Minn., closed for the season the middle of October.

Country elevator men expect that larger amounts of durum wheat will be raised in the Northwest next year.

R. E. Jones Co. will have its new grain elevator at Alma, Wis., completed by the first part of December.

A new farmers' elevator was opened at Milan, Minn., in October. J. G. Peterson is in charge of the business.

E. W. Burrhus has opened an office in Flanagan's warehouse at Readstown, Wis., and is buying grain at that point.

The Thorpe elevator at Red Lake Falls, Minn., has been closed for the season and will not buy grain this year.

Work started the last of October on a new grain elevator at Clinton, Minn. It will have a capacity of 20,000 bushels.

The Northland Elevator at Northland, Minn., was opened to receive grain in October. A. Torkelson is the buyer at the house.

Stock amounting to \$5,000 has been subscribed for by farmers for the purpose of building a grain elevator at Lakefield, Minn.

Farmers in the vicinity of New Ulm, Minn., are talking of organizing a company to erect a new grain elevator at that place.

The Bennett Grain Co. has improved its grain elevator at Le Sueur, Minn., by the addition of a new grain cleaning machine.

The Atlantic Grain Elevator at Oslo, Minn., has been completed and is in operation, with Tom Dalen in charge of the business.

The D. L. Thompson grain elevator at Hastings, Minn., has been purchased by F. H. Schriber of St. Paul, Minn. The consideration was \$15,000.

William Maxwell, who owns a grain elevator at Fairfax, Minn., and who also has a brokerage office in Minneapolis, Minn., failed recently for about \$11,000.

L. H. Rice of Park Rapids, Minn., has installed an electric motor at his grain elevator and is said to be much pleased at the manner in which it runs the machinery.

The Cargill Co. is contemplating building a large steel grain elevator at Duluth, Minn., the coming year. It will be of large capacity and will be of steel construction.

A new and modern grain elevator is being erected at Theilman, Minn., by the R. E. Jones Co. It will be ready to receive grain by the last of the month.

A new grain elevator has been completed at Rolette, Minn. Rolette is a new town, but is starting off in a thriving condition, as there are large grain crops in that vicinity.

Ben Roderick of Decatur, Wis., and R. B. Gifford of Monroe have purchased the grain and lumber business of John Legler at Juda, Wis. It is Mr. Legler's purpose to retire from active business for the present.

The Electric Steel Elevator Co. of Minneapolis, Minn., has placed its contract with the Minneapolis Steel & Machinery Co. for a large steel elevator on its property at Twenty-fifth and Marshall streets, northeast. It will have a capacity of 500,000 bush-

els, consisting of five tanks, and will be completed by January 1.

A. G. Zimmerman has purchased the grain elevator of Dave Patterson at Greenleaf, Wis. The price paid was \$3,000. Mr. Patterson will have the grain business for another enterprise.

E. G. Bennett has completed a new grain elevator and feed mill at Horicon, Wis. He will make the grinding of feed a specialty and will serve farmers both with his feed mill and elevator, which will be operated in connection.

E. L. Phelps & Co. have placed their contract with H. G. Bushnell & Co. for a frame grain elevator on Franklin Avenue near Cedar, at Minneapolis, Minn. It will be 32x36, 75 feet high, and covered with corrugated iron.

Henry Rippe has bought the S. Y. Hyde Elevator at Fairmont, Minn., and has torn down all of the house except about 100 feet of the flat house portion. He will use this part as a warehouse for his mill products. He will use the balance of the lumber to build a grain and flour storage warehouse at Ceylon.

John Donovan of Van Dyne, Wis., and William Rahr of Manitowoc have purchased the grain elevator at Van Dyne from the Reinig estate. The consideration was \$2,500. Mr. Donovan is grain buyer at Van Dyne for the Manitowoc Malting Co., and the elevator will be used in conjunction with that business.

The new elevator of the Wisconsin Elevator Co. at River Falls, Wis., was completed in October. The building is 26x28 feet on a strong foundation of stone and concrete. There will be eleven bins in the elevator, each 36 feet deep, besides two shipping bins 29 feet deep. A 5-ton shipping scale will be on the ground floor and a 5-ton Savage & Love ball-bearing dump scale on the dump floor. The dump scale room will accommodate three loaded wagons. The machinery will be run by a 10-horsepower electric motor.

The Albert Dickinson Co. of Chicago is building a large steel elevator at Elm Street and Twenty-fourth Avenue southeast, Minneapolis, Minn. It will be used for the storage of seeds and will have a capacity of 650,000 bushels. The Minneapolis Steel and Machinery Co. had the contract for the steel work. The company is also building a large addition to its cleaning mill, which stands near the site of the new elevator, and it is reported that plans will be adopted for making a number of other extensive additions.

CANADIAN.

P. G. Bird has sold his feed and flour business at Belleville, Ont.

A new elevator has been completed at Craik, Sask., by the Dodd Elevator Co.

The Alberta Milling Co. of Edmonton, Alta., is planning to build another elevator near its mill.

The Elevator "D" at Fort William, Ont., commenced taking in and shipping out grain in October.

Wm. Stead & Co. have sold their grain elevator at Wood Bay, Man., to the Smith Grain Co. of Winnipeg.

A proposition is under way to organize a farmers' elevator company to build a new grain elevator at Hamiota, Man.

James Mack of Prince Albert, N. W. T., will build a grain elevator at Vonda, N. W. T. A flour mill will also be built in connection.

The Peterborough Cereal Co. of Peterborough, Ont., has the work well under way on its new grain elevator and mill at that place.

Grain storage tanks with a total capacity of 200,000 bushels will be erected by the Western Milling Co. at its plant at Calgary, Alta.

Work has been going forward rapidly on Kidd's new grain elevator and flour mill at Prince Albert, Sask. The mill is of brick construction.

Elevator "B" at Fort William, Ont., was put out of commission a short time in October by the breaking down of some of the machinery.

It is reported that two more elevators will be built at Davidson, Sask., after the first of the year. This will make five elevators at that point.

The Rathwell Farmers' Elevator Co. of Rathwell, Man., has been incorporated with a capital stock of \$20,000 to erect a grain elevator at that point.

The 40,000-bushel grain elevator at Fox Warren, Man., owned by A. Laycock of the Standard Grain Co., has passed to the control of the Dowd Milling Co.

The Smith Grain Co. of Winnipeg, Man., has been incorporated under the provisions of the Manitoba Joint Stock Co.'s act, with a capital stock of \$40,000, to build grain elevators, mills and warehouses at points in the province. The incorpor-

ators include M. K. Smith, F. E. Murray, Winnipeg; E. Florence, Humboldt, Sask.; A. N. Eklund, Williams, Minn., and James K. Gray, Northcote, Minn.

The Prescott Terminal Elevator Co.'s elevator at Prescott, Ont., which has not been in operation for the past seven years, began receiving grain in October.

The Canadian Elevator Co. has a second elevator about completed at Craik, Sask. The capacity of the house is approximately the same as their other house at that point.

The two towns of Wacopa and Dufresne, Man., have openings for grain elevators, and the business men of these points hope to succeed in securing houses at each place.

Wright & McDonagh of Russell, Man., sold their grain elevator and business at that point to the Export Elevator Co. The latter company has sent a buyer there to handle grain at that market.

Bullock & Son of Crystal City, Man., have commenced work on a new grain elevator at their mill at that point. It will have a capacity of 50,000 bushels and will be situated just west of the old elevator.

J. E. Hall of Winnipeg expects to have his new grain elevator at Vancouver, B. C., ready for operation by the middle of December. It will have a capacity of 150,000 bushels and will handle grain from the Alberta and Saskatchewan grain fields.

The Goderich Elevator Co. of Goderich, Ont., has placed its contract for a new grain elevator with S. H. Tromanhauser of Minneapolis, Minn. The elevator will be of cement and steel construction and have a capacity of about 500,000 bushels.

E. D. Osborne, the well-known business man and grain man of Kinburn, Ont., will erect a new grain elevator at Arnprior, Ont., and has asked the citizens of that town to take half of the stock in the company which will be organized to build the house.

The two new grain elevators at Hanley, Sask., the Canadian Elevator and the Herriott & Milnes Elevator were in full working order the middle of October and handling large amounts of grain. The average capacity of the houses at that point is about 30,000 bushels.

The Western Canada Cement and Coal Co. of London, England, has been organized to engage in Canada. One of the objects of the business will be the establishment of a number of grain elevators throughout the Northwest. It is reported that a large amount of money will be spent in developing this part of the business.

The grain elevator which the Grand Trunk Railway Co. has had under construction for some time in Montreal harbor is expected to be completed by the end of November. It will be operated next season under the management of Geo. H. Hanna, manager and secretary of the Montreal Warehousing Co., in which the Grand Trunk Co. is interested. The elevator is located on what is known as Wellman Point, a piece of land which juts out into the basin opposite the Allen wharf on one side of the canal, and on the other side is the river. The elevator consequently will be able to load or unload steam boats in the canal basin and in the river, while a belt conveyor gallery several hundred yards in length has been erected for loading the big steamers in the basin opposite the Allen wharf. The elevator has a total capacity of 1,000,000 bushels. The machinery will be operated by electrical power.

WESTERN.

Smith Bros. have engaged in the grain business at Hayburn, Idaho.

The High Creek Mill & Elevator Co. has leased its plant at Richmond, Utah.

A wholesale hay, grain and feed business was established on November 1 at Spokane, Wash., by E. C. Blanchard.

L. O. Caswell has purchased a large tract of ground for a site at Red Lodge, Mont., on which he will erect a modern elevator and grain warehouse.

C. L. Fish's grain warehouse at Sprague, Wash., has passed to the control of the Farmers' Grain & Supply Co. It is expected that the company will sell sufficient stock to raise the money for an additional grain elevator there.

The erection of large docks and warehouses for the handling and exportation of wheat and flour is contemplated at the mouth of the Columbia River, in Astoria, Ore., by a corporation which conducts a similar line of business in Portland. The company has taken options on a tract of water front property between Humes Mill and the old Scandinavian tannery to be used as a site. It is also reported that later a large

flour mill will be built. If the deal goes through it will be a valuable acquisition to the town of Astoria.

The big elevator owned by the Judith Basin Milling Co. at Lewistown, Mont., commenced operations in October. It is run by water power and is equipped with modern machinery for the rapid handling of grain. It has a capacity of 70,000 bushels.

The East Washington Implement Co. has been organized at Walla Walla, Wash., with a capital stock of \$25,000. The object of the company is to buy and sell grain, operate warehouses at Walla Walla and surrounding points where it may be deemed advisable. The incorporators are John Leahy, Samuel Sweeney and Richard McGahey.

A branch of the Farmers' Grain & Supply Co. has been organized at Harrington, Wash., with a membership of about 43 and a subscribed capital of about \$5,000. The new concern has secured a lease on the large grain warehouse owned by C. W. Bethel at Harrington and also contemplates the erection of a large steel storage tank, which will be completed before the time for marketing the next year's crop.

SOUTHERN AND SOUTHWESTERN.

Wood & Battin have sold out their grain business at Eagle City, Okla.

The Hobart Mill & Elevator Co. of Hobart, Okla., has leased its elevator.

W. S. Duncan & Co. of Atlanta, Ga., one of the largest grain firms of the South, have let the contract for a new grain elevator at that place.

The elevator which the Clift Grain and Elevator Co. of Hastings, Okla., is building at Marlowe, will be 24x36 feet and 24 feet high, with a capacity of 20,000 bushels.

It is reported that the Cookville Roller Mills Co. of Cookville, Tenn., will build a 25,000-bushel grain elevator at Cookville next spring. The elevator will be operated in connection with the milling plant.

The Pembroke Warehouse Co. of Hopkinsville, Ky., has been chartered with a capital stock of \$10,000. The incorporators are: J. J. Garrett, W. H. Jones, William Wilson, W. R. Dudley and E. B. Ledford.

The Custer City Mill and Elevator Co. of Custer City, Okla., has been incorporated with a capital stock of \$25,000. The incorporators are: T. P. Stone, Henry Harman and Leon L. Hoyt, all of Custer City.

The Midland Mill & Elevator Co. of El Reno, Okla., commenced work in November on a large grain elevator at Bixby, I. T. It is said to be an exceptionally good point, as there is a large amount of grain marketed there.

The Nashville Warehouse and Elevator Co. of Nashville, Tenn., expects to have its new 100,000-bushel concrete elevator completed and ready for operation by January 1. The house is located down in the milling district.

Plans have been completed for a new grain elevator which will be built along the Santa Fe right-of-way at Ramona, I. T. The elevator will be located in a fine grain section, and it is expected will do a very large business.

It is reported that the Chesapeake & Ohio grain elevator "B" at Newport News, Va., which has been closed almost continuously since it was built about six years ago, will be reopened and operated for the remainder of the fall and winter.

Articles of incorporation have been filed by the Western Grain Co. of Fort Smith, Ark. The capital stock is \$50,000 and the officers are: J. Herman Hunt, president; R. E. Dove, vice-president, and J. H. Carnahan, secretary and treasurer.

The Florida Mill and Elevator Co. of Jacksonville, Fla., has been organized with a capital stock of \$10,000, to manufacture and sell feed and food-stuffs. The incorporators are: Angus S. Baker, R. S. Rosborough and Ernest A. Watson.

The Chickasha Milling Co. of Chickasha, I. T., has about completed a new grain elevator at Mountain View, Okla., where the company operates a branch mill. Power in the elevator will be furnished by a 22-horsepower gasoline engine.

The grain elevator at South McAlester, I. T., was overhauled in October and equipped with new machinery. The elevator was somewhat out of date, but after the new improvements are put in they will be able to handle grain rapidly and economically.

The Wood & Crabbe Grain Co. has been organized with a capital stock of \$50,000 to carry on a general grain business at Birmingham, Ala. The officers of the company are as follows: Wade Wood, president; T. J. Pickhard, vice-president; B. F. Crabbe, secretary and treasurer. The mem-

bers of the firm were formerly connected with J. C. Whitfield & Co., which recently liquidated their business.

The Capital Grain Co. of Guthrie, Okla., has adopted facilities consisting of scales for buying and shipping grain from Seward, Okla.

The J. R. Smith Milling Co. will rebuild its burned plants at Purcellville, Va. Two buildings will be erected, 30x88 feet and 20x30 feet, respectively, and will be equipped with machinery for grain elevator and meal and feed mill. In all about \$16,000 will be expended on the two buildings.

The Farmers' Mercantile and Gin Co. has been incorporated at Birmingham, Ala., with a capital stock of \$20,000. A part of the business will consist in dealing in grain. L. Berry is president of the company; L. F. Heintz, vice-president, and Charles J. Barton, secretary and treasurer.

The Dixie Grain Co., which was organized some time ago at Shelbyville, Tenn., had everything in readiness at their large warehouse for business at the middle of October. The company has a capital stock of \$15,000 and has officers consisting of W. A. Frost, president; H. L. Woollsley, treasurer, and J. E. Dixon, general manager. The company has facilities for handling large amounts of wheat, corn and hay. Corn will be bought in the ear and will be shelled and sacked by machinery. Hay will be baled and shipped to all points.

The Stuyvesant Dock and Wharf of the Illinois Central Railroad at New Orleans, La., now nearing completion, will be an even mile long and built entirely of steel. The two grain elevators built to replace the burned houses are likewise of steel and have a combined capacity of 2,500,000 bushels. The conveyors from the elevators to the dock will be of steel and have a capacity of 80,000 bushels per hour. The railroad company believes that the bulk of the export grain of the middle West and West is naturally tributary to New Orleans and has planned the terminal facilities in the Crescent City to handle grain shipments on a large scale.

IOWA.

John Gilmore's new elevator was completed at Imogene, Iowa, in time to receive the new corn.

Bowen & Regur, grain dealers of Des Moines, Iowa, have incorporated under the same style.

It is reported that a movement is on foot for the establishment of a farmers' elevator at Yatter, Iowa.

William Hayton has sold his grain elevator at Anthon, Iowa, to the Westbrook-Gibbons Elevator Co. of Omaha.

The new grain elevator at Gilbert, Iowa, was receiving its equipment of new machinery the last part of October.

The Trans-Mississippi Grain Co. is equipping its grain elevator at Sergeant Bluff, Iowa, with two improved Hall Distributors.

The farmers in the vicinity of Richards, Iowa, held a meeting to discuss the advisability of building an elevator at that place.

E. Parker & Son have purchased the grain elevator owned by Mr. Brick at Jesup, Iowa. The transfer was made the last of October.

An addition is being built on the Co-operative Elevator at Kanawha, Iowa. It will consist of a storage addition of 20,000 bushels' capacity.

Ingold & McIntyre have purchased the elevator owned by the Hall-Wellman Lumber Co. at Harris, Iowa. C. M. Hepler is manager of the business.

E. B. Hess has leased the grain elevator at Greeley, Iowa, and has overhauled the machinery and put everything in good shape for its operation.

The Farmers' Co-operative Co. has been granted a site for a grain elevator, coal and lumber sheds on the C., M. & St. P. right-of-way at Garner, Iowa.

The grain elevator at Anderson, Iowa, owned by Thomas Hutchinson, was overhauled the first of November and placed in first-class condition for handling grain.

The T. & N. Elevator at Tabor, Iowa, was overhauled the first part of November and put in condition for receiving grain. David Felger is local manager of the house.

The DeWolf & Wells Co. have enlarged their grain elevator at Ruthven, Iowa, and have added machinery to enable them to handle large amounts of grain more rapidly.

The walls of the Milwaukee Grain Elevator at Maquoketa, Iowa, which have been standing since the fire of a few weeks ago, have been torn down and the site has been obliterated.

Messrs. Van Dorn & Cooper made a selection for a site on the Rock Island right-of-way for the new elevator which they propose to build at Council Bluffs, Iowa, but it was not satisfactory to the railroad company, and it is expected that an agree-

ment will be reached for constructing the house at some other location.

M. W. Small has purchased Mr. Huntley's interest in the Huntley & Pepin elevator at Salix, Iowa. The new owners will run the business under the firm name of Pepin & Small.

G. G. Stevens is building a large addition to his grain elevator at Cherokee, Iowa, having found the former capacity of the house insufficient for handling the grain that has been arriving this fall.

A. J. Lockart, at Clear Lake, Iowa, has been granted a site on the right-of-way of the Rock Island company for a new grain elevator at that point. It will have a capacity of about 20,000 bushels.

The Northern Grain Co. is enlarging its office room at the elevator at Belle Plaine, Iowa. R. C. Dugan is manager of the business, which has increased so much of late as to require the aid of an assistant.

W. B. Agnew of Fairbank, Iowa, recently purchased the grain business of P. J. Miles at Oelwein. Mr. Miles has bought grain continuously in Oelwein for the past 31 years, as he settled in Oelwein as grain buyer in 1874.

The town of Erma, Iowa, which was recently started near Waverly on the north branch of the Iowa Central, will shortly have a new grain elevator, as the foundation of a large size house was completed in October.

The Perkins Mill and Elevator at Loveland, Iowa, has been bought by James W. Hutchinson and Daniel H. Bailey. The new owners repaired the buildings and overhauled the machinery, starting up the plants the middle of November.

The Farmers' Co-operative Society of Palmer, Iowa, has bought the Wheeler Elevator at that point, and will take possession on December 1. Mr. Wheeler acquired the elevator some time ago when he purchased a line of elevators belonging to the Chicago Grain and Elevator Co. The Farmers' Society were about to build a third elevator at that point, which Mr. Wheeler thought would be too many for the town, and so sold out.

The Farmers' Cereal Co. of Sloan, Iowa, has adopted plans for a new elevator at that point which will comprise a building 50x50 feet, with 50-foot corner posts, surrounded by a 26-foot cupola. It will be a cribbed structure of modern construction with a capacity of 35,000 bushels. The engine room and the office will be built separate from the main structure. The elevator will be equipped with a 25-horsepower James Leffel steam engine, with a 30-horsepower boiler. The machinery will include one of Barnard & Leas Cornwall Cleaners and an 800-bushel hopper scale, with car mover, etc.

The Des Moines Elevator Co. and the Missouri Elevator Co. are building a large grain elevator at Kansas City, Mo., through which the gulf shipments of the line houses operated by the two companies in Iowa and Missouri will be handled. The elevator will have a capacity of 1,000,000 bushels of grain and will be equipped also as a clearing house. When the new elevator is built at Moberly, Mo., to take the place of the house burned there, the company will have three central and clearing stations on its lines. J. J. Snyder will remove from Des Moines to Kansas City to take charge of the plant there.

THE DAKOTAS.

Fritz & Harris are buying grain at Saint Lawrence, S. D.

Two new grain elevators have been completed at Pingree, N. D.

Sarles, N. D., is to have a new elevator built by Knudson & Ryall.

H. C. Webb has sold his grain elevator at Deering, N. D., to the Acme Elevator Co.

The Farmers' Elevator Co. has commenced work on a large elevator at Donnybrook, N. D.

The Osborn-McMillan Co. commenced work in October on a new elevator at Sarles, N. D.

McKee & Minthorn have sold their elevator at James, S. D., and will engage in other business.

The Mandan Mercantile Co. commenced work in October on a new grain elevator at Garrison, N. D.

The Farmers' Elevator Co. is building an additional storage to their elevator at Manfred, N. D.

The new McCall-Webster Elevator at Roeville, S. D., has been completed and is receiving grain.

William Hall completed a new grain elevator at Amity, N. D., and took in the first wheat October 18.

McClusky & Sons' grain elevator at McClusky, N. D., was opened for business early in November.

Wait & Dana have been granted elevator sites at Corsica and Stickney, N. D., new towns on the Armour Extension of the St. Paul road. They have

commenced the erection of two new modern grain elevators.

Work commenced the middle of November on two additional grain elevators for Rock Lake, N. D.

The Hollst Elevator at Gladstone, N. D., was completed and placed in operation the middle of October.

The new grain elevator at Hebron, N. D., built by Schwigert & Co., was placed in operation early in November.

Jacob Thill, until recently a resident of Wylie, Minn., has engaged in the grain business at Berthold, N. D.

The Hawkeye Elevator Co. has purchased a site and material for a grain elevator at the new town of Forbes, N. D.

H. W. Willis has bought the Jenkins Elevator at Lansford, N. D., and will engage in the grain business at that point.

Martin Kortgaard has purchased a portable grain elevator for operation in connection with his elevator at Kramer, N. D.

The Schmitt & Anderson Grain Co. commenced taking grain at their new 25,000-bushel elevator at Buchanan, N. D., in October.

The new elevator at Palermo, N. D., built by the Twin City Elevator Co., was completed in October, with a capacity of 20,000 bushels.

D. N. Cantdell, grain dealer of Ypsilanti, N. D., has erected a large warehouse at Jamestown, which will be used for grain storage.

It is reported that J. E. Dyer, whose application for a site for a grain elevator at Belfield, N. D., has been refused, will buy grain and ship.

The Minnesota and Western Grain Co. recently announced that their new elevator at Crary, N. D., would be in operation early in November.

Fred Brosz, who recently purchased the Ashley Elevator at Ashley, N. D., has remodeled it and increased the storage room to 28,000 bushels.

A. J. Lockhard of Clear Ridge, S. D., has been granted a site for a grain elevator on the right-of-way of the Rock Island Railroad at that point.

Two new grain elevators are under construction at Rutland, S. D. One is being built by Abraham & Schultz and one by the Hawkeye Elevator Co.

Turtle Lake, N. D., has been badly in need of a grain elevator and it was expected that work would commence on a new house early in November.

The new grain elevator which the Woodworth Elevator Co. is building at Fairdale, N. D., is expected to be ready for operation by last of November.

D. S. Snyder of Anamoose, N. D., is building a temporary warehouse for T. H. Rix's elevator at that place. Later he will construct a 25,000-bushel elevator.

Cameron Bros. and K. Melby have formed a company to engage in the grain business at Kramer, N. D. They have just erected a new elevator at that place.

Corsica, S. D., has demonstrated the fact that it is a good location for grain elevators. The recent reports are that seven new ones will be built at that place.

Manager Lindgren, of the Dakota Elevator at Fessenden, N. D., has installed a new grain cleaner as a necessary addition to the elevator's line of machinery.

The Oleson Elevator at Westport, S. D., has been purchased by Mr. Agor. The elevator is in a good location and a large amount of grain is marketed at that point.

Ellendale, N. D., will have a new grain elevator completed very shortly by the McCall-Webster Co. of Minneapolis, Minn. It will have a capacity of about 25,000 bushels.

D. O'Connor of St. Thomas, N. D., has leased his elevator at that point to W. C. Leistikow of Grafton. Mr. O'Connor and family have gone to California for the winter.

A report states that Albert Mathias of Barney, N. D., will remove to his old home at Colfax, where he will engage in the grain business. Otto Mathias will remain in Barney.

The Hawkeye Elevator Co. has about completed a new grain elevator on the Great Northern right-of-way on Sixth Street, Sioux Falls, S. D. The building is 100x60 feet.

The Ireys Co. commenced buying grain at their new elevator at Flaxton, N. D., in October. The house has a capacity of 22,000 bushels and is the largest of five elevators at that place.

D. L. Lytle, grain dealer of Tolley, N. D., writes us that he has sold his elevators at Glenburn and Lansdorf on the Great Northern Railway, and has built three elevators on the Soo

Railway at Tolley, Hurd and Eckman, N. D. The new elevators are of 25,000 bushels' capacity each, up to date and doing a good business.

The Hawkeye Elevator Co., in addition to elevators which it is erecting between Sioux Falls S. D., and Yankton, will build new elevators on the new extension of the Great Northern road in Nebraska.

The Exchange Elevator at Linton, N. D., owned by the Taylor Elevator Co. of Minneapolis, Minn., was being pushed rapidly to completion the last part of October. It is expected to be in operation early in November.

The Hawkeye and Atlas companies had a large force of men at work on their two new elevators at Yankton, S. D., the last part of October, and it was expected that the houses would be ready to receive grain by the close of the month.

The Minneapolis and Northern Elevator Co. began work early in November on the construction of a new elevator at Bartlett, N. D., to replace the one burned at that place in October. It will have a capacity of about 40,000 bushels of grain and will be equipped with modern machinery throughout to make a first-class house.

THE EXCHANGES

A recent sale of a Chicago Board of Trade membership was made at \$3,175 net to the buyer.

A committee has been appointed to arrange for the erection of the Winnipeg Grain Exchange's new building.

The president of the Chicago Board of Trade has been authorized to appoint a committee to secure a safer and simpler method of clearing trades.

By vote of the board of directors of the Chicago Board of Trade, Armour Elevator, comprising houses St. Paul and Fulton Annex, and the receipts thereof, upon request of the Armour Elevator Company, have been declared no longer regular warehouses for the storage of grain and flaxseed under the rules of the Board of Trade.

The directors of the Chicago Board of Trade have acted favorably on the application of the J. Rosenbaum Grain Co. of Chicago to have Rock Island Elevator "B" reinstated as a regular house, and Rock Island Elevator "A," which has not been regular under their control, made regular. The "A" elevator has a capacity of 1,500,000 bushels and the "B" house a capacity of 1,000,000 bushels.

In response to its complaint to the Department of Railway and Canals, relative to the delay of grain barges passing down the Lachine Canal, the committee of management of the Montreal Corn Exchange received a communication from the secretary of the department, stating that the minister would visit the canal to arrange, if possible, to follow out the suggestions for improved service made by the committee.

The officers chosen at the recent election of the Minneapolis Chamber of Commerce are as follows: P. B. Smith, president; G. F. Piper, vice-president; J. R. Marfield, H. F. Douglas, John L. Tracy, A. H. Poehler and James V. McHugh, directors. L. Christian, L. C. Remund and J. R. Martin were elected on the board of arbitration. Thomas N. Taylor, G. A. Duvigneaud and W. O. Timmerman were elected to serve for two years on the board of appeals and A. G. Chambers was chosen for a one-year term on the same board.

Private wire houses which have men at their telephones on the floor of the Chicago Board of Trade are making an attempt to install clerks at the telephones in place of the members who are now serving. They propose to pay the Board an additional \$200 per year, thus leaving them free to sell the memberships now held by the telephone operators. Many members object to the proposition because it would throw about forty memberships on the market and offset in great measure the benefits expected from the fund levied for the retirement of existing memberships. A special assessment of \$25 for the latter purpose is payable November 15.

A number of grain men who are members of the Cincinnati Chamber of Commerce have organized the 'Change Club, for the purpose of promoting social intercourse. H. H. Hill has been elected president and W. R. McQuillan secretary-treasurer. The following are the members: Dan B. Granger, Clyde Emrick, Frank Hoffman, Parker Gale, Al Dowling, John DeMolet, William Kramer, Charles Heuermann, Joseph Heuermann, Charles E. Knaul, E. W. Richter, C. E. Nippert, Joseph F. Costello, John Allen, Charles Van Leunen, Albert Gale, Ed Fitzgerald, Harry Borgman, P. M. Gale, August Ferger, Tom Moore, Frank Currus, George Mul-

hauser, Max Blumenthal, Andrew Braun, Charles Karlin, Frank Maguire, Charles Hill, E. C. Arnold, W. S. Todd, Ben Wess, L. M. Brown, Ed Dennis, W. H. Weber, H. Brouse, William Stueve, E. Terrill.

The Montreal Corn Exchange has suggested to the Board of Railway Commissioners that the new car service rules of the board be amended in two particulars. The changes affect, very slightly, Rules 8 and 15 of the new table. The first change deals with the notification of consignees by the railroads of the arrival of freight and suggests that consignees be given until noon of the day following posting of notification before they be held duly notified. The rules, as framed, designate 7 a. m. of the day following. The second suggested change affects the rule concerning the charges for detention of cars, but merely substitutes "over 48 hours" for "over the time allotted."

AVERSE TO 80 PER CENT RULE.

The rules committee of the Chicago Board of Trade has reported unfavorably on the petition of some of the receivers for a rule requiring the payment of 80 per cent of the value of consignments to shippers on receipt of bills of lading.

The committee has a plan of its own and expects to develop it. There was also opposition to the scheme on the part of some of the directors, who contended that it would operate in favor of the larger houses. It was claimed it would be unfair to compel payment for the grain before actually received, as railroads might hold cars some time, and also that occasionally on declining markets or in case of deterioration in quality of grain 80 per cent of the bill of lading amounts to more than 100 per cent of the actual value.

TORONTO DEALERS PROTEST.

The grain section of the Toronto Board of Trade recently passed the following resolution:

"In view of the fact that there have been very serious delays in supplying cars for grain from elevator points for the past two or three years, which has resulted in very serious loss to the grain dealers and millers, not only on interest and insurance, but also loss owing to having sales of grain cancelled on account of being unable to get the cars in time; and it is stated that preference is given to grain for export, especially to American grain, contrary to the railway act, therefore, be it resolved, that the Railway Commission be requested to inquire into the question and take whatever action is necessary to prevent this discrimination and compel the railways to provide proper facilities to handle the business with reasonable dispatch."

NEW HAY AND GRAIN GRADING RULES AT MEMPHIS.

At a meeting of the Memphis Merchants' Exchange a new set of grading rules for grain and hay, recommended by the rules committee of which Chas. D. Jones was chairman, were adopted by vote of the directors, subject to approval by the Exchange at large. The new rules are as follows:

Rule 11 changed to read as follows:

"Section 1. A buyer shall be entitled to reinspection of grain in cases where thorough inspection cannot be made on track, or where there is evidence of a car's having been irregularly loaded and found to contain different grades or qualities.

"Section 2. In case buyer calls for reinspection and is sustained by the inspector according to the above rule, the inspector shall issue a certificate of reinspection in accordance with the grade contained in the car."

One of the changes in the corn description is that covering the inspection of No. 2 St. Charles white corn shall be corrected as follows:

"No. 2 St. Charles white corn shall include all good, sound, dry, white corn of the St. Charles variety."

The following rules for the inspection of oats were adopted:

"No. 2 yellow oats shall be yellow oats, dry, sound, sweet, reasonably clean and reasonably free from other grain, but must contain at least 50 per cent of white grains.

"No. 3 yellow oats shall be yellow oats not sufficiently dry, sound or clean for No. 2 yellow, but must contain at least 25 per cent white grains.

"No. 4 yellow oats shall be yellow oats, not wet or in heating condition, but from causes unfit to grade No. 3 yellow.

"Clipped oats shall be same as for natural oats, except that they shall be clipped."

Some of the changes in present oat grades follow:

"No. 2 oats, 'color' shall be three-fourths white, and in condition the same as No. 2 white oats.

"No. 3 color oats shall be three-fourths white and in condition the same as No. 3 white oats."

A new qualification for the inspection of wheat follows:

"In case of a mixture of soft winter wheat and

hard winter wheat, it shall be graded according to the quality thereof and classed as hard winter wheat."

For new hay grades see hay department.

INDEMNITIES AT CHICAGO.

Traders in indemnities at Chicago have been going on as usual in the smoking room of the Board of Trade, but not without the objection of several large houses, who have taken an aggressive stand against them. And recently a reputable and learned attorney, in an opinion handed to President Jackson, declared that there is substantially no difference between "bids and offers" and "puts and calls," both being objectionable under the statute and the opinion of the Supreme Court of the state.

WILL CONSIDER COMMISSION CHARGES.

Before any change is made in the commission rule of the Chicago Board of Trade the matter will be taken up with other exchanges, this on report of the special committee recently appointed to consider the subject.

The committee recommended important changes and consultation with other markets before advancing the commission rate from one-eighth to one-fourth cent. Accordingly President Jackson is arranging for a conference of members of other exchanges.

GRAIN ASSOCIATION OF ALBERTA.

President Strong, of the recently organized Alberta Grain Association, declares that preparations will at once be made to become independent of the Manitoba grading. An inspector has been appointed for Calgary and a distinct grading can be established. Wires will be received from Fort William each morning for the Association. It is estimated that 2,500,000 bushels of fall wheat was produced south of Olds this year, and that next year it will be close to 5,000,000 bushels.

Alberta Red is the name to be given this variety in contradistinction to Turkey Red and Nasas Red. The milling capacity south of Olds by spring will approximate 2,500 barrels daily. An effort is to be made to concentrate the milling of all Alberta grain in Alberta. Alberta will join with Manitoba in handling the Canadian Pacific special grain trade in January, when the Dominion government will provide experts to lecture to the farmers of the West. Twenty-five stops will be made in this province.

PUBLIC WEIGHING AT CINCINNATI.

A special committee of the membership of the Cincinnati Chamber of Commerce, consisting of O. G. Fetter, H. H. Hill and B. W. Gale, on October 21, submitted to President H. Lee Early a report upon the question of "a system of public weighing in this market which shall be entitled to the full confidence of all concerned, and which will so safeguard official reports of weighing as to insure the highest attainable degree of accuracy and reliability."

The committee first take up the question of authority as contained in the by-laws of the Chamber of Commerce Association and find nothing from such standpoint to occasion delay in passing upon a proposition looking to a change in the system of weighing. The report then continues as follows:

"The committee, having reached the conclusion that the needful betterment of official weighing in this market cannot be secured otherwise than by making it a part of the work of the Chamber of Commerce, by which the Association would have full supervision, direction and management of such service, entered upon an inquiry as to the probable cost of carrying out such proposed system in its relation to the probable income, so that an understanding could be had in this important matter. An inquiry was made as to the number of cars of grain and hay weighed out from warehouses of four prominent concerns, which resulted in an indication of about 18,000 cars for twelve months from such sources, which makes it reasonable to calculate upon fully 20,000 cars as requirements for official weighing in a year from the several warehouses. The records of the Chamber of Commerce indicate that the arrivals of grain and hay in the year 1904, exclusive of receipts for through movement, exceeded 20,000 cars. These data imply a total of 40,000 cars or more as a basis of calculations as to the extent to which grain and hay should be expected to be subject to weighing in a period of twelve months.

With these evidences of the extent of requirements of official weighing, and the conclusions reached in regard to expenditures necessary to maintain a system within the Chamber of Commerce service, the committee finds reason for believing that there is certainty of an income to cover all expenditures, with probability of considerable surplus, under the working of the plan now under consideration.

Therefore your committee recommends the adop-

tion of a system of public weighing which shall be brought within the service of the Chamber of Commerce, by appointment and employment of a chief weigher, under a fixed salary, and of assistant or deputy weighers, also under fixed salaries, which salaries of the chief weigher and of the deputies are to be determined by the board of directors, the charges or fees for weighing services to be payable to and collectable by the Chamber of Commerce, the accounts of which are to be kept in such manner as to indicate the expenditures incident to the operation of this department, and of the income therefrom.

In the matter of salaries, the committee is of opinion that the services of a competent chief weigher can be secured at \$200 per month, and deputy weighers at \$75 per month, or less, possibly at \$60. On the basis of thirty deputies at \$75 per month the aggregate of salary accounts would be about \$25,000 per year.

The committee deems it inexpedient to propose a lowering of the present rate per car for official weighing, of incoming grain and hay, until something of a test has been made, while if the expectations as to results shall be realized there will follow an opportunity for an important reduction in weighing charges. Therefore the committee recommends that the charge for incoming grain and hay shall be \$1 per car, and for outgoing grain and hay 50 cents per car, such rates to prevail until the board of directors find it expedient to adopt lower charges.

The committee, in submitting the plan herein outlined, recommends that in the event of its approval and adoption by the board of directors, a committee shall be appointed to perfect rules in detail applicable to the inauguration and operation of the system thus adopted, with a request for a report at the earliest practicable date, so that the plan can be put into effect without needless delay.

In concluding this report the committee feels justified in inviting and urging favorable consideration of the new plan, which has been carefully studied, not only with reference to probable cost and income, and the benefits which such control and supervision of weighing operations will secure in the ordinary course of business locally, but also in the effect of such a system under the direct supervision of the Association upon creating among country shippers a confidence in the reliability of official weighing operations here as to overcome the misgivings which have arisen incident to the present plan of authorizing or licensing various persons to act under such official appointments. When the shippers of grain and hay can find reason for regarding the official returns of weights in this market as deserving recognition for the fullest attainable degree of accuracy and reliability under the direct working of the Chamber of Commerce there will beyond question and naturally be an incentive and inducement to more favorably regard this market in the offerings of such produce, so that an important enlargement of business may be counted on, to the decided advantage of our local interests.

At a meeting of the directors and the grain and hay merchants, on November 10, the directors served notice that beginning on December 1 they would inaugurate the new system on the basis outlined above.

The Lake Superior Car Service Association handled at Duluth in October 46,613 cars, as compared with 44,259 in October, 1904, which was also a record breaker. This leaves October 2,354 cars in excess of any other month in the history of the Association in the number of cars handled.

Give the reports of "disappointing buskings" and "Corn rotting in the shock" no ear; they are faked up for a purpose. The point to rely upon is this—the crop is 500,000,000 bushels greater than last year. The additional acres, the full grained ears and the better feeding value of the grain make this as near certain as anything can be. Now, for the conclusion. What reasonable difference in price can you look for? Exports were never sufficient to sustain the prices of a new crop at a high value. I do not look for low prices, but if this crop makes 40 cents a minimum price, you will soon see our corn crop doubled.—E. W. Wagner, Chicago.

Two very peculiar ears of corn were exhibited at the late fair in Houston County, Minnesota, which are there described by the St. Paul Pioneer-Press:

"One ear is smaller than an ordinary apple, but the peculiarity of it is the husk. Instead of a large husk covering the whole ear, there is a husk for every separate kernel. The length of each husk is about an inch and each kernel with its husk has the shape of a diminutive corn ear.

"Another peculiar ear shown in the exhibit is a half breed between the primitive corn and the corn of to-day. The ear has a cob not larger than a lead pencil. It has the full length of the ordinary ear, but the kernels, instead of being filled out like common corn, are slender as an oat and nearly an inch long."

HAY AND STRAW

Pastures in New York state were green as late as the middle of last month, October.

August Widdel of Bennington, Iowa, has shipped a car of hay from Denver to interior Missouri.

Lambert Bros. at What Cheer, Iowa, are reported to be in position to ship choice timothy hay.

E. R. Miller & Co., Wadena, Minn., have purchased a hay press and are baling hay for shipment.

The annual report containing the proceedings of the Toledo convention, it is expected, will be issued in a few weeks.

Keiner & Schroeder are baling hay around Gooselake, Iowa. One possesses a gasoline engine and the other a baler.

A building 44x62 feet has been erected at Webb City, Mo., by R. H. Barber, to be used as a hay and feed and general store.

Fire recently damaged the feed and grain storehouse owned by W. H. Miller at Hartford, Conn. The storehouse contained 2,000 bushels of oats, ten tons of hay and some coal. The loss was \$1,500.

Bryant Bros., hay contractors at Tilford, S. D., in a fire which occurred October 25, lost over 200 tons of hay, a hay barn and a number of sheds. The loss was estimated at \$2,500, with insurance \$1,250.

J. B. Garland & Son, wholesale grain, hay and flour dealers at Worcester, Mass., are erecting a brick storehouse and stable. The building is to be 26x160 feet, two stories high, with a pitch roof, and will cost \$6,000.

A farmer near Towner, N. D., has been successful in an attempt to raise a good quality of clover and timothy in that section of the state. This farmer has a large farm and has raised nothing but tame grasses during the past four years.

At Minot, N. D., hay has been received in large quantities, but owing to a very heavy demand the price paid has been high. A number of the meadows had green grass on them up to three weeks ago and the fall cutting has been large.

After securing by means of a postal card vote an expression of opinion from the members of the National Hay Association as to the most desirable time for holding the next annual meeting of that Association, Secretary Goodrich has announced the dates as July 2, 3 and 4. Headquarters are to be at the Hotel Victory, Put-in-Bay Island.

A report from Waco, Texas, says that the finest lot of hay ever produced in that section of the Lone Star State has been coming to market and finding a ready sale. Owing to lack of moisture there were not so many crops gathered this year, but the very lack of moisture produced a finer quality of hay. Good money also was realized in the prairie hay and Johnson grass business.

Frauk Williams, the New York hay commission man, has secured an able helper in the person of Jefferson G. Fraughidi. "Jeff," as he is familiarly known, has been identified with the hay trade for twenty-two years. Eighteen years ago he was in the employ of Mr. Williams. In the interim he has spent sixteen years with the American Hay Co. and two years with George M. Dickerson. Mr. Fraughidi is favorably known to shippers particularly through New York state and Canada, as well as through Indiana, Ohio and Michigan. He has a strong, earnest personality and is an indefatigable worker.

The experiment station at Hays City, Kan., has produced a variety of alfalfa which will give three crops a year on the uplands of Western Kansas. The experiments have covered a period of three years, and the result, as announced by the Topeka Capital, is estimated to be worth several million dollars to farmers on the uplands, to whom the idea of securing three crops of alfalfa in a dry year is considerable of a novelty. During a year when there is a good deal of rain the yield will be five or six crops. The alfalfa will be tested a few years more at the experiment station, after which time seed will be distributed to the farmers of Kansas.

Secretary Goodrich announces the following as new members of the National Hay Association: Geo. E. Van Vorst, New York, N. Y.; J. H. Snowden, Lerna, Ill.; A. G. Dohm, Girard, Ill.; Herman Schmidt, Cleveland, Ohio; The Dorsel Co., Newport, Ky.; Smith Bros. & Velte, Lake Odessa, Mich.; W. C. Agee & Co., Birmingham, Ala.; W. F. Richardson Jr. & Co., Richmond, Va.; E. P. Rector, Pt. Peninsula, N. Y.; F. L. Cottrell, Saegertown, Pa.; Western Grain Co., Birmingham, Ala.; Hugh C. Braxton, Staunton, Va.; Fred Muller, New Orleans, La.; W. A. Pritchard, Pendleton, Ind.; Robert T. Crossen, New York, N. Y.; J. M. Middle-

kauff, Spielmans, Md.; Deibel Bros., Little Rock, Ark.; S. V. Craig, Washington, D. C.; Geo. O. Stembel, Wheatfield, Ind.; D. S. Cook & Co., Basil, Ohio.

The Central Hay and Grain Company of Louisville, Ky., was incorporated October 25, with a capital of \$7,500. Officers are James S. Minary, president; Wesley M. Harrison, secretary, and T. H. Minary, vice-president. The incorporators feel that Louisville is the real gateway to the South and their aim is to make that city a recognized center for the distribution of hay to southern and southeastern points.

H. H. Price and Charles Wells, who were arrested at Louisville, Ky., several months ago, have been indicted by the Louisville grand jury. Two indictments were returned, one of six counts and the other of thirty counts. The men are charged with conspiring to defraud the Kentucky and Indiana Bridge Company and other railroads. The plan said to have been employed by the men was to reweigh cars of hay and report them erroneously. Fraudulent bills of lading were sent out and afterward overcharges claimed and collected from the roads. Price was a member of the Barton-Price Hay Co. and Wells was yardmaster for the Kentucky and Indiana Bridge Co.

Alfalfa meal is being manufactured in large quantities at the plant of the Cottrell Feed Co., Elgin, Ill. The factory is run by water power, which enables the company to place their product on the market at about bran prices. The Cottrell Feed Co. is a new company, but its officers have had much practical experience in manufacturing and dealing with alfalfa products. Professor Cottrell, the president, has for three years managed a large grain and stock farm in Iowa. Prior to this he was superintendent for seven years of former Vice-President Morton's dairy farm on the Hudson River. For six years he was professor of agriculture at the Kansas Agricultural College.

According to the St. Paul Pioneer-Press, St. Paul, Minn., is "destined to become the great hay mart of the United States," because it is in the center of the "greatest natural hay-producing section of the country" and is one of the greatest railroad centers. Average weekly hay receipts at St. Paul are 75 carloads, and something like two-thirds of this goes to the stock yards. The cut-over lands in northern Minnesota and northern Wisconsin are being used more generally for growing clover and timothy. These tame hays are shipped to the eastern ports on the Great Lakes. The prairie and hardwood sections of Wisconsin and Minnesota, it is said, produce a choice clover and timothy grass.

RESTORING HAY TO SIXTH CLASS.

Early in October a special committee of the National Hay Association, composed of President Voris, Geo. C. Warren and J. W. Duschbery, appeared before the official classification committee in New York, making a formal request that hay and straw be restored to the sixth class.

C. E. McGill, chairman of the classification committee, has addressed the following communication to President Voris in reply:

"Referring to your favor of September 26, you are respectfully advised that this subject was considered by the Official Classification Committee at a recent meeting, with the result the committee did not see their way clear to recommend to lines in interest any change in the existing classification of the property, for the reason that the present classification provides only reasonable revenue to carriers for transportation service."

COMMITTEE ON HAY GRADES.

The special committee on grades appointed by the National Hay Association consists of city representatives and shippers. J. A. Heath of Lenox, Mich., is chairman. Other members are: City representatives—J. D. Carscallen, New York City; E. T. Simpson, Washington, D. C.; Bonacker, Jacksonville, Fla.; G. S. Blakeslee, Chicago, Ill.; John B. Ryan, Indianapolis, Ind.; Conrad J. Clausen, Louisville, Ky.; Jos. S. Grasser, New Orleans, La.; A. A. Kuhl, Baltimore, Md.; J. K. Elliott, Minneapolis, Minn.; Geo. D. Jewell, Duluth, Minn.; John J. Schulte, St. Louis, Mo.; J. A. Brubaker, Kansas City, Mo.; S. M. Ratcliffe, Buffalo, N. Y.; Pliny Gale, Cincinnati, Ohio; Herman Schmidt, Cleveland, Ohio; John Tingley, Columbus, Ohio; F. W. Lipe, Toledo, Ohio; C. A. Foster, Pittsburg, Pa.; Benj. Martin, Philadelphia, Pa.; P. W. Harsh, Nashville, Tenn.; Walter Webb, Memphis, Tenn.; John E. Cox Jr., Richmond, Va.; E. B. Hodges, Norfolk, Va.

Shippers—W. H. Lilley, Jefferson, Colo.; J. H. Bramlet, Eldorado, Ill.; Geo. W. Heath, Edgewood, Ill.; Maurice Niezer, Monroeville, Ind.; H. W. Boles, Milroy, Ind.; Frank Gaines, Fairland, I. T.; R. G. Hoppes, State Center, Ohio; H. G. Weinburg, Lamont, Iowa; W. H. Beatty, Norway, Kan.; Brooks Dawson, Port Huron, Mich.; Milo F.

Gray, Moline, Mich.; E. H. Schreiner, Lamar, Mo.; C. H. Springer, Moravia, N. Y.; D. W. Beam, Hemlock, N. Y.; John Fangboner, Fremont, Ohio; N. M. Huber, Plain City, Ohio; P. H. Harsha, Portsmouth, Ohio; N. W. Sullivan, Lardenburg, Pa.; J. L. King, Westchester, Pa.; W. K. Martinez, Elizabeth, N. J.; J. E. Dixon, Shelbyville, Tenn.; J. W. Ellison, Waynesboro, Va.; H. Boncher, Luxemburg, Wis.

TIMOTHY SCARCE IN THE EAST.

Receipts of hay at New York and other Eastern points do not include many cars of fine timothy hay. Meadows which in the last few seasons have yielded good crops of choice and No. 1 timothy, this year yielded a crop with considerable clover in it, with the result that not only New York, but other Eastern markets are receiving large quantities of medium and low grade hay. Hay which in other years would go no better than No. 2 timothy is this year sold as a No. 1 timothy, owing to the scarcity of the latter. However, when a shipper forwards a car of timothy hay heavily mixed with clover as choice or No. 1, because it happens to be the best hay in his section of a state, it does not follow that the hay will be accepted as such when it is received at the terminal market. Timothy with a slight sprinkling of clover might easily take a choice or prime timothy price, but timothy with a good deal of clover in it is sold on its merits as a mixed hay.

NEW YORK HAY RULES.

Rules governing the sale and purchase of hay adopted August 2 by the New York Hay Exchange Association were put into effect November 1. The rules as adopted are:

Rule 1.—The full time to be allowed a purchaser on a car of hay to be the day of purchase and the following one, unless the car be purchased on the day of arrival, when the full free time allowed by the railroad companies for delivery shall be given the purchaser.

Rule 2.—The seller guarantees marked weights within five pounds on large bales and three pounds on small bales, if same is to be reweighed.

Rule 3.—The purchaser must notify the seller within 48 hours of the time of purchase if the same is to be reweighed, otherwise marked weights to stand.

Rule 4.—When hay is tallied officially by any railroad company for lighterage the buyer must settle on the official tally in all cases, subject to rule three.

Rule 5.—The date of sale to count in computing the time in which purchase is to be paid for.

Rule 6.—All disputes between members and purchasers of hay shall be referred to the committee on arbitration for settlement, their decision to be final.

Rule 7.—A copy of these rules is to be posted at each market, and a confirmation sale ticket shall be passed between the buyer and seller, this ticket to have printed on same, "Subject to rules of New York Hay Exchange Association," and said ticket to be signed in duplicate by buyer and seller.

CAR SHORTAGE AND THE HAY TRADE.

We cannot get cars, and the prospects are that we are not liable to get them for some time to come.—Susquehanna Valley Hay Co., Towanda, Pa.

The situation here in regard to hay is very peculiar. All our shippers write they are having great trouble in getting cars from the railroad companies. We are receiving very few invoices. We have a good many orders on hand and are having trouble in getting them filled. All receivers say the same thing. Yet the receipts in the local market are quite heavy. We understand the N. Y. C. R. R. will furnish a limited number of cars to be billed only to Boston. It is expected that these conditions will prevail for at least two months. The trade at country points has been very good to within a week, but the demand has fallen off greatly the past few days. The mild, bright weather which has prevailed in New England has affected the stock hay trade materially. There is very little call for clover mixed or stock hay at present (October 27).—W. S. Leavitt & Co., Boston.

Nashville is so far removed from the Eastern markets that the condition in regard to cars to go East has no effect whatever upon our market. Our hay coming to us is mostly from Illinois, and we have no difficulty in getting cars for hay coming from there to Nashville.—J. H. Wilkes & Co., Memphis.

It is generally reported in about all hay-producing sections that cars for the shipment of hay are very scarce; and I think that this condition will have the effect of lessening receipts in this market. We are experiencing great difficulty in getting our hay loaded in the country.—F. Williams, New York.

I am doing all the business I can get cars to ship the hay in. The car situation is rather serious at the present time. However, I think it will improve later on.—F. W. Lipe, Toledo.

The car situation is serious in Michigan, Wisconsin,

Iowa, and particularly Kansas.—T. D. Randall & Co., Chicago.

The car situation is very bad now, and it is just beginning. Very little hay is coming from Kansas, because there are no cars to ship it in; and the Chicago hay market is at least \$1 a ton high on that account. We want hay, but cannot get it. I think this condition will soon be worse than it has ever been before.—H. H. Freeman & Co., Chicago.

The car shortage is what is making hay so high in Kansas City. Receipts have fallen off 50 to 75 per cent because shippers who would like to forward hay cannot get cars to do so. We are not shipping, the market being too high. The situation is not improving, and we think it will be still worse before it is better.—Hamacher-Nichols Co., Kansas City.

NEW HAY INSPECTION RULES AT MEMPHIS.

The following specifications for the grading of hay were adopted by the Memphis Merchants' Exchange:

"Choice alfalfa shall be reasonably fine, leafy alfalfa, of bright green color, properly cured, sound, sweet and well baled.

"No. 1 alfalfa shall be coarse alfalfa of bright green color, or reasonably fine, leafy alfalfa of good color, and may contain 5 per cent of foreign grass, but must be well baled, sound and sweet.

"No. 2 alfalfa shall include alfalfa somewhat bleached, but of fair color, reasonably leafy, not more than one-eighth foreign grasses, sound and well baled.

"No. 3 alfalfa shall include bleached alfalfa, or alfalfa mixed with not to exceed one-fourth foreign grasses, but when mixed must be of fair color, sound and well baled.

"No grade alfalfa shall include all alfalfa not good enough for other grades, caked, musty, grassy or thrashed."

One of the changes is for prairie hay, which hereafter must be "upland or midland, and swale, or bog hay, mixed, well cured, free from must, or stained upland or middling hay, reasonably sound and free from must, and from any cause not good enough for No. 2 prairie hay."

No. 3 Arkansas prairie hay hereafter "shall be Arkansas upland and midland, and swale, or bog hay, mixed, well cured, and free from must, or stained upland and midland hay, reasonably sound and free from must, and from any cause not good enough for No. 2 Arkansas prairie hay."

THE SHRINKAGE OF HAY.

A. C. Stiles asks whether others have weighed clover green, then dried it and reweighed to determine the shrinkage. This has been done at the Michigan Experiment Station, where, in 1897, 4,691 pounds of freshly cut clover made 1,960 pounds of dry hay, a shrinkage of nearly 60 per cent. The hay was weighed again the following November, when it weighed 180 pounds less. A writer in the Country Gentleman in 1896 reported a similar experiment wherein 1,520 pounds of green clover dried down to 680 pounds of cured hay, a shrinkage again of 56 per cent.

A more interesting matter is the shrinkage of hay between fall and spring. A farmer ought to know what difference to make in the price of the hay of these two seasons, or rather how much more he ought to ask for hay in the spring to make the receipts equal to what they would have been at a given price in the autumn. Here are some data on that point:

Naturally the shrinkage depends on the condition of the hay when put into the mow and also on the climate. Five tons of fairly dry timothy hay was stored on the 27th of June. For a time it was covered with unthrashed grain. Six months later, January 26, it was weighed and found to have lost 684 pounds, or 7 per cent. Again, on the 6th of July, 5,600 pounds of dry hay was drawn from the field. It was reweighed after lying in the mow until February 18 following, when it had lost 776 pounds, or 13.7 per cent. A farmer put 130.5 tons of hay in the barn in early summer, and pressed it out the following January. He baled 100.5 tons, and had a ton and a half of dirt and chaff under the press. This hay was too ripe when cut, and here shows a shrinkage of 21.7 per cent.

At the Utah station a stack was put up July 20, 1892, weighing 4,565 pounds. It was weighed again in the April following, when it had actually gained 1 per cent of the original weight. A stack of clover hay gained in the same time 10 per cent of its weight. These trials were made in the climate of Utah, and the results are no guide as to what would happen in the eastern states.

At the Missouri station, 5,678 pounds of timothy hay was stacked as drawn from the field. The next spring it had shrunk 12.5 per cent. The hay drawn from the same field and put in the barn

had shrunk the next spring but 7 per cent. A stack of second-growth clover hay shrank 30 per cent by the following March. Hay hauled to the barn in July rather too dry apparently, clover with some timothy, was reweighed in November and had shrunk but 3.6 per cent. Mammoth clover hay, very dry when raked, but allowed to cure in the field one day and one night, shrank by the middle of the next February 11.2 per cent.

As to the proper percentage of water in cured hay, Professor Atwater thinks that, in Connecticut at least, timothy hay retains as much as 12 per cent of moisture, clover hay 14 per cent and corn fodder 25 per cent.

TIPS ON LOADING OF HAY.

"Some shippers evidently fail to recognize the absolute necessity of loading hay as it should be," said a hay man, recently, to a contemporary, "and the oversight causes them severe losses upon what should and would, if properly handled in the car, bring a good price. When a new crop is handled great caution should be used in putting it up from the cutting to the baling, but of what use is this if a shipper, who, either through ignorance or carelessness, insists on loading it into the car in such fashion that when it makes its appearance on the market, it is hot, and what might have been even choice hay is hard to sell as any grade?"

"The most essential point in loading new hay is to see that it is not loaded flat, that is, with the flat sides of the bale up. When loaded this way, with the smooth sides of the bales together, no space is left for air and as a consequence it invariably heats. A properly loaded car has the edges or rough sides of the bales together. This allows air space between the bales and always prevents danger of heating. Do not try to load cars with the purpose of beating the railroad out of a few cents in weight. It's much better to pay in excess of the actual weight if necessary, for the selling price of your hay will more than make up to you the excess freight expense. In putting up hay it depends largely upon whom you ship to as to the size of the bales. If you ship to small jobbers who deal almost exclusively with the retail trade of the city, it is advisable to make the bales small, but generally the trade on the market will create as good a demand for 75-pound bales as for 60-pound bales."

WAREHOUSE AT PITTSBURG.

The "most absolutely fireproof warehouse in existence" has been erected in Pittsburg by the Pittsburg Terminal Warehouse Company. The warehouse has been built for purposes of renting and it is claimed there is not a piece of wood used in its construction. The warehouse is arranged in two sections with rail facilities between, and provides the largest cold storage room in Pennsylvania. Each section contains 20 sub-warehouses, each 145 feet deep, with a 25-foot front. The cost of the warehouses will run over \$3,500,000, and they will be partly ready for occupancy December 1. They are equipped with stables and fine power plant.

All railroads centering in Pennsylvania have arranged to deliver to or take from the warehouse any freight that may be ordered in or out, regardless of quantity, carload or less than carload lots.

G. W. C. Johnston, of the Keystone Commercial Company is general manager and treasurer of the warehouse company, J. I. Buchanan is president, and James A. Henderson is vice-president. The company is not affiliated in any way with the Keystone Commercial Company, although Mr. Johnston is manager of one and president of the other company.

The Keystone Commercial Company has leased space in the warehouse and is constructing grain bins and elevator, and equipping with the latest improved machinery to carry on its own grain and feed business.

Mr. Johnston has been a prominent and influential member of the hay trade for many years. He was one of the originators of the National Hay Association, and was nominated as its president, but withdrew his name from nomination.

The government report making the corn crop 2,707,993,000 bushels came like a thunderbolt, wrecking prices for all grain, and the fervor of the bulls for the moment. Based on numerous private reports, everyone expected the government figures would be less than those of October, but an increase of 68 to 70 million bushels threw the bull ranks into disorder with symptoms of colic at the close. If the figures to-day are right, then those of October were very wrong, because in trade circles the recent reports of actual yields are generally below the October estimates. But in any case there is "enough." Though Secretary Shaw refused to "help out" the stock market, Secretary Wilson's report does it admirably, if grain and cotton do suffer.—Pope & Eckhardt Co.

COMMISSION

Frank E. Knight has become associated with the grain firm of J. H. Cressey & Co. of Boston, Mass.

The Skewis Grain Co. has succeeded Skewis-Moen Co., grain commission merchants of Minneapolis, Minn.

The United Grain Co. of Toledo, Ohio, received the first lot of new corn arriving in that market on October 20.

F. E. Lincoln of Fargo, N. D., has established a brokerage business in the Exchange Building at Duluth, Minn.

Robert W. Chapin, of Chapin & Co., feed dealers of Buffalo, N. Y., left recently for a three weeks' trip in Mexico.

McGuire & Atwood, grain commission merchants of Superior, Wis., have moved their headquarters to Duluth, Minn.

Charles F. French, secretary of the Taylor Grain Co. of Topeka, Kan., has engaged in the grain commission business in Kansas City, Mo.

J. G. Claphamson, who has been engaged in the grain commission business in Minneapolis, Minn., for the past fifteen years, has removed to St. Louis, Mo.

Reamy Field, of the brokerage firm of W. R. Todd & Co. of Cincinnati, Ohio, was in Chicago recently on the business of securing representation for his firm on the Chicago Board of Trade.

E. W. Basset, of the Basset Grain Co. of Indianapolis, Ind., returned recently from a trip to the Lewis & Clark Exposition at Portland, Ore., and an investigation of Western grain conditions.

A number of Chicago firms who have been doing business in puts and calls on the Milwaukee Board of Trade, have closed their offices in that city with the intention of doing business in Chicago.

John Wickenheiser, head of the grain firm of John Wickenheiser & Co. of Toledo, Ohio, member of Toledo's City Council, recently received the nomination for county treasurer on the republican ticket.

The J. B. Edgar Grain Co. has been chartered at Memphis, Tenn., to do a general grain and storage warehouse business. The capital stock is \$10,000, and the incorporators are T. B. Jones, V. L. Rogers, A. O. Taylor, J. B. Edgar and T. M. Scruggs.

The Grain and Feed Dealers' Protective Association of Philadelphia, Pa., held its annual meeting on October, electing the following officers: Edwin J. Shaunce, president; John F. Jones, vice-president; George B. Moore, treasurer, and Geo. K. Craig Jr., secretary.

The receiver for Fyffe-Manson & Co. of Chicago has been discharged and the bankruptcy proceedings have been dismissed. Creditors will get nearly \$40,000, or 25 per cent of the claims, which are about \$150,000. It is expected that L. H. Manson will resume business.

Chas. M. Fresch, formerly of Chas. M. Fresch Grain Co., and S. T. Marshall, both well known on the St. Louis Merchants' Exchange, have organized the firm of Fresch-Marshall Company at St. Louis, Mo., to do a general grain commission business. The capital stock is \$50,000.

The firm of Richards & Hammond was organized on November 1 to engage in the grain receiving and shipping business at Baltimore, Md. Mr. Richards was formerly secretary and treasurer of the Smith-Gambrill Co. Mr. Hammond has also been identified with the grain interests of Baltimore for a number of years.

The brokerage firm of A. J. Whipple & Co. at 145 Monroe Street, Chicago, was placed voluntarily in the hands of a receiver in October. John Alling, one of the members of the firm, said that during the panic of May, 1901, the firm had lost so much money that they never had since been able to recuperate. The firm had done a good business since that time, but their obligations were too great. The liabilities are said to be from \$100,000 to \$150,000, with assets of about \$50,000.

ERIE CANAL BARGES.

The model 1,000-ton barge recommended for use on the new Erie Canal will be made of steel, and built on lines to carry the cargo on the least draft and also to maintain the shape of the hull and thereby keep down the resistance when in motion. Heavy towing bits will be provided at both ends with windlass for hauling the lines. A long hatch will be arranged with beams across, which can, if desired, be made detachable for vessels intended to carry material of extra length and bulk.

The floor will be made flat to secure the greatest possible displacement with bilge slightly rounded to prevent cutting away the banks and damage to hull in locks, if the vessel should have a slight list. Frames have been arranged twenty-four inches center to center and stiffened at intervals by web frames and cross-beams together with longitudinals. The house for the accommodation of the crew will be depressed to keep down the height within the fifteen and one-half feet from the water line to the under side of hridges.

The tugs will also be built to carry cargoes and will have a speed of between four and five miles an hour in the canal. The power will consist of a double-compound surface-condensing engine with cylinders of ten-inch and twenty-eight-inch by eighteen-inch stroke. The length of the barge will be 150 feet with twenty-seven-foot beam.

The present season has been as good a one on the canal as its antiquated equipment would allow, owing to the rail blockade. Early in the season dozens of canal boats were lying idle, the little grain that arrived being shipped by rail. Canal men were barely meeting expenses, which resulted in many of the boats going into ordinary earlier in the season than usual. They, however, have benefited by the blockade, for much of the grain was turned over to them for transportation to the seaboard and during October they got exceptionally good rates.

IN THE COURTS

James C. Rogers of Glens Falls, N. Y., obtained a judgment by default against the Federal Stock and Grain Co. of Boston for \$12,630 on October 16.

The muddle at New Richmond, Ind., involving the defunct co-operative elevator company was settled on August 28, when the elevator was sold to a Richmond gentleman for \$15,125.

The Chicago Board of Trade has asked for a receiver for the Central Grain and Stock Exchange, Hammond Elevator Co., Sid McHie, and about twenty other individuals identified with the McHie enterprises at Hammond, a judgment of \$1,101 against whom has been returned unsatisfied.

Rockwell & Co. on October 30 attached a car of grain at the Wabash yards, Black Rock, Buffalo, owned by Orpheus W. Bishop of Williamsport, Ind., on a charge of debt on contract. The suit is for \$838.25 and based on an aileged contract by Bishop to sell to Rockwell & Co. 7,650 bushels of No. 3 white oats, of which 3,414 bushels have been delivered.

The Railroad and Warehouse Commission of Minnesota has directed the C. M. & St. P. Ry. Co. to pay to the Loftus-Hubbard Elevator Co. of St. Paul an overcharge of \$56.13. The Loftus-Hubbard Co. paid a 5-cent rate from Hastings, while a rate of 4 cents was in force from Afton, further down the line. The road claimed that Hastings was not an intermediate point from Afton to St. Paul, but the Commission holds that it is.

The Superior Court of Cook County, in the case of L. G. Bostedo against the Chicago Board of Trade, has held that the Board has the right to discipline a member for sending orders through a bucket-shop. Charges were brought against Bostedo that he was violating the rules by sending stock orders to the Cella Commission Company, a St. Louis bucket-shop, and the latter was expelled. Bostedo sued the Board for said action. He lost.

The Dakota Elevator Co. has brought suit at Duluth against the N. P. Ry. Co., to recover the sum of \$236.73, the value of 11,912 pounds of flax lost in transit. This was the leakage out of a car that on starting weighed 54,992 pounds at New Rockford, N. D. It is alleged that the railroad company neglected to use reasonable care in handling or transporting the flax, but placed it in a car that was unfit, and that by reason of such handling, a large quantity of the flax was lost or destroyed.

The law of Kansas, enacted last winter, which requires railroads in that state either to furnish sites of grain elevators or to build sidetracks to them if they are located within a reasonable distance from the right-of-way, will be tested by a suit begun by the Missouri Pacific Railway Co. It is the old case of the Hargreaves Grain and Live Stock Association, a farmers' co-operative institution, which applied for a site for an elevator or for a switch to a site off the right-of-way. The Missouri Pacific refused to grant either. The grain concern appealed to the Railroad Commission, which granted an order directing the road to comply, according to law. The Missouri Pacific now appeals to the courts, claiming that the law

is unconstitutional because it deprives a railroad of property without due process of law. It also claims that the grain company is a trust.

Frank Dickson of Greenfield, Ind., and the Basset Grain Co. of Indianapolis are thrashing out in court a difference of \$1,818.10, which the company claims Dickson owes them as balance due on grain deals involving \$22,281.50.

A judgment was obtained at Buffalo on October 20 by C. P. Washburn and others against the steamer Gordon Campbell, owned by Wm. F. Carroll of Chicago. The action was to recover \$5,000 damages to a cargo of 80,000 bushels of clipped oats shipped by the libellants on the Campbell from Chicago to Buffalo. The evidence was that the Campbell was at fault in that she was not in reasonably fit condition at the time of sailing, and the cargo was consequently wet. The amount of the damages will be fixed by officer of court.

Indictments were returned by the federal grand jury at Louisville, Ky., on October 13 against Hollis H. Price of the Barton-Price Company, hay and grain dealers, and Charles Wells, a former employe of the Indiana & Kentucky Bridge and Railroad Company, charging them with having violated Section 10 of the interstate commerce law and also with conspiring to defraud by falsifying weights of cars and collecting rebates from railroad companies. Witnesses will be brought from North Carolina, South Carolina, Tennessee, etc., when the trial is called in March next.

Commerce Commissioner Prouty was at Detroit on October 24 to continue an examination, begun in February last, into the charges made by the Richmond Elevator Co. of Richmond, Mich., against the Pere Marquette Railroad, that the latter had discriminated against them in the matter of furnishing cars, and thereby caused them heavy loss. The Commission in February decided that the discrimination had been made, and the hearing of October 24 was had to enable the Elevator Company to show the actual financial loss sustained. The evidence adduced tended to show that this was about \$14,000.

The action entitled Stephen Mitchell against the Monarch Elevator Co., tried at Cooperston, N. D., involved the question of the constitutionality of the statute giving thrashers first lien on grain thrashed. Plaintiff thrashed grain for S. Almklov and Christ Steinborn. They sold this grain to the elevator company before the thrasher filed his lien. They refused to pay the bill and the elevator was sued. The main defense of the Monarch Elevator Company was that it had bought the grain and shipped it out of the state before the lien was filed. The court held that the thrasher's lien dates from the date the thrashing is commenced. The case will go to the Supreme Court.

The Minnesota Railroad and Warehouse Commission has taken under advisement a complaint by Loftus-Hubbard Co. of St. Paul against the C. M. & St. P. Ry. Co., that the carriers had made an extra charge of \$1.50 per carload on a consignment of hay for transferring every car from the delivery tracks near the state scales to the Chicago Great Western tracks, three-quarters of a mile away. The hay had been consigned to St. Paul and later reconsigned to the Loftus-Hubbard elevator at the West Side. The Loftus-Hubbard Co. claim that free delivery as required by law includes the delivery at the place of consignment without extra charge for switching. The railroad company claimed delivery had been made on the regular delivery tracks and that the reconsignment necessitated additional service on the part of the Milwaukee in hauling the cars over to the Chicago Great Western tracks.

Corn huskers in Dodge County, Kansas, demanding 6 cents a bushel, the children of suitable age were impressed by farmers, and ten schools of the county were closed until the work was finished. It has everywhere been difficult this fall to get huskers at the old or reasonably advanced prices for labor.

Don't load seed with grain. It causes delay and does not save any freight. Don't sell by sample unless you are sure you have exactly the same seed, or it may lead to trouble. Buyer may need a particular kind of seed, and might demand a big difference should it turn out different from the selling sample. Nearly all of the seed shipped here is sold on consignment.—C. A. King & Co., Toledo.

All previous records of large grain cargoes brought to Buffalo were broken on October 14. The big steel freighter F. B. Wells, Capt. A. Shaver, master, arrived at noon from Washburn, Wis., with 50,000 bushels of corn, 50,000 bushels of barley and 265,000 bushels of oats, a total of 365,000 bushels, which is many thousands ahead of the previous record. With the exception of a small portion of the oats, the whole consignment went to the Kellogg Elevator. The Wells was chartered to I. Jenks & Co.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Liability for Loss by Fire of Grain on Spur Track.

In an action brought to recover from a railroad company for the loss by fire of one carload of corn, one carload of oats and one carload of gluten and bran, it appeared that all the cars reached their destination on July 18, and were placed on a spur track next to the plaintiff's warehouse, and that he was duly notified of their arrival. Early in the morning of the 19th, being shortly after midnight, a fire broke out in the plaintiff's property adjacent to the spur track, which consumed his warehouse and from which the three cars and their contents, standing on the spur track, took fire and were consumed. The Supreme Court of Rhode Island holds (*Vaughn vs. New York, New Haven & Hartford Railroad Co.*, 61 Atlantic Reporter, 695) that the plaintiff was properly non-suited.

The carload of corn was shipped by a party who agreed to pay the freight thereon, a bill of lading being sent through his bank to another bank with a draft upon the plaintiff attached, which the plaintiff admitted he was to pay before he could get the corn, but which he did not pay until after the fire, claiming that he thereby became owner as of the 18th. The court holds that the title to the corn had not passed to the plaintiff at the time of the fire. It says that he could only obtain title to the same by paying the draft and obtaining the bill of lading, which he had not done prior to the destruction. The sale was conditional upon the payment of the draft, and the title still remained in the consignor at the time of the fire, and the carload of corn had not been delivered to the plaintiff at that time. It was still locked and sealed with the seal of the defendant. Where merchandise is billed in this manner, in the absence of the most convincing testimony to the contrary, it is almost conclusive that the intention of the parties is that title does not pass until payment of the draft and delivery of the bill of lading. Therefore, inasmuch as the plaintiff did not own the corn, he could not recover for it.

The carload of oats and the carload of bran and gluten, the court goes on to say, were undoubtedly the property of the plaintiff, and had been delivered to him and passed into his possession and control at the time of the fire. The liability of the defendant as a carrier as to these cars was then at an end. Another thing, the bills of lading for these cars expressly exempted the defendant from liability for loss by fire in the following language: "No carrier or party in possession of all or any of the property herein described shall be liable for any loss thereof or damage thereto by causes beyond its control; or by floods or by fire," etc. It would appear, therefore, the court says, that in any event, so far as these two cars were concerned, the defendant would not be liable, except in the case of gross, willful or criminal negligence, for the loss either as a common carrier or as a warehouseman. But there was no evidence of negligence on its part. Moreover, under the testimony the court does not find that the defendant was even a warehouseman. The property had been delivered on the spur track to the plaintiff. He had accepted it, sold and removed some of it, and had assumed full dominion over it; and the mere fact that it still remained in the defendant's cars was a mere matter of convenience for the plaintiff, but did not impose any liability on the defendant.

Separation from Mass Not Necessary to Passing Title.

On a sale of 70 bushels of flax mixed with flax of like quality and grade, the Supreme Court of North Dakota holds (*O'Keefe vs. Leistikow*, 104 Northwestern Reporter, 515) that the mere fact that there had been no separation of the part sold from the mass would not prevent the title from passing if the parties intended that title should pass and the property sold had been identified. It says that the price was not paid, but that was not necessarily a condition precedent to the passing of title. The payment of it might be waived. Whether the title passes or not under such circumstances depends on the intention of the parties, to be gathered from the terms and conditions of the contract and the circumstances surrounding and attending the sale. There is no rule that can be stated to govern all cases. Each must be controlled by its own facts.

There is a diversity of conclusions reached by courts and text-writers as to the rules that should

govern in cases where the property sold is mixed in an unseparated mass with other like or similar property. It seems to be generally held that if the property sold is mixed with other property not like in quality or size and a certain grade or quality is sold, then the separation and selection is presumptively a condition precedent to the passing of title. It is also held in many cases that, if there must be measuring or selecting of certain kinds of property from a mass before the price can be ascertained, then no title presumptively passes. These rules are always subject to the intention of the parties.

In this case the property was identified and ascertained. The subject-matter of the contract was specified as 70 bushels of flax on a certain farm. The price was fixed. Delivery was not dependent on the payment of the price, but prepayment waived. Nothing was undetermined, or dependent upon measuring or weighing the flax. The mere fact that the 70 bushels were mingled with other flax was not of controlling importance, unless something was to depend upon the measuring. The evidence showed an intent to pass the title at once. There was nothing in the record to negative an intention on the part of the seller to part with the property, nor on the part of the buyer to accept it at once. The buyer and seller became tenants in common of the flax, each having the right to take his share therefrom.

The following cases are in point on this question: *Mecham on Sales*, Sec. 516; *Hurff vs. Hires*, 40 N. J. Law, 581; *Mackellar vs. Pillsbury*, 48 Minn., 396; *Nash vs. Brewster*, 39 Minn., 530; *Kimberly vs. Patchin*, 19 N. Y., 330; *Chapman vs. Shepard*, 39 Conn., 413; *Hoffman vs. King*, 58 Wis., 314; *Young vs. Miles*, 20 Wis., 615; *Newhall vs. Langdon*, 39 Ohio St., 87; *Howell vs. Pugh*, 27 Kan., 702; *Riddle vs. Varnum*, 20 Pick., 280; *Straus vs. Minzesheimer*, 78 Ill., 492; *Crofoot vs. Bennett*, 2 N. Y., 258; *Welch vs. Spies*, 103 Iowa, 389; *Waldron vs. Chase*, 37 Me., 414.

FOREIGN NEWS

The Argentine is going into oats, the growing crop of which looks fine.

Irish wheat of 1905 crop has been selling locally at better prices than have been obtained in England for native wheat.

Many new railways have been planned for Cape Colony which if built will open up a large amount of land suitable for grain.

English criticism of new Manitoba wheats, the first lots of which arrived about October 15, is, "Only of moderate quality" and somewhat disappointing.

Russia is practically without grain storage facilities outside the ports; hence the damage done to wheat on its way to the sea during a freight blockade.

A strike of grain weighers and measurers at Antwerp held up 35 grain steamers during the past week of November. The strike was due to the introduction of mechanical grain elevators, which reduced the wages of the men.

The English are talking of reviving their inland waterways, the cost of which is estimated at £3,500 (\$17,500) per mile, against £46,000 (\$230,000) per mile for railroads. This would give canals capable of floating boats of a carrying capacity of 50 tons.

The estimated yield per acre of Irish wheat this last season was 33.72 bushels, against 38.53 in Scotland and 26.52 in England. Irish farmers obtained better yield for barley, oats and clover and meadow hays than did English farmers; but the latter beat the Irish badly on potatoes—6.11 tons against 4.27 tons in Ireland.

A new wrinkle in wheat stealing was evolved by an ingenious farmer at Echo, Minn., the other day. Returning to the elevator one night after dusk the agent found the said farmer with a wagonload of wheat on the dump hopper. Although no wagon was in, the farmer, who said he lived seven miles southwest of town, after considerable discussion induced the agent to pay him \$7 on account, notwithstanding the strong suspicion that the wheat in the hopper had been let down from the bin above. One night, four weeks later, a cloud of dust was seen coming out of the hopper just at dusk and the agent ran up the driveway. He found the same man hid in a bin, and, after turning him over to the police, found that over 50 bushels of wheat had been run into the hopper.

FIRES--CASUALTIES

Moler & Clark's grain elevator at Montezuma, Iowa, was damaged by fire recently.

The Denison Mill & Elevator Co.'s plant at Denison, Texas, was recently damaged by fire.

Bigstaff & Cockrell's seed cleaning warehouse at Mt. Sterling, Ky., was burned October 14.

A. L. Bartlett Co.'s grain establishment and feed mill at Rockford, Ill., was recently damaged by fire.

The Cargill Grain Co.'s Elevator at Page, N. D., collapsed recently, letting about 1,000 bushels of grain out over the roadway.

The grain elevator and mill of G. W. Marble of Woodstock, Vt., was damaged by fire in October. The fire was caused by burglars.

Incendiaries made an unsuccessful attempt to burn the Alexander Milling Co.'s grain elevator at Winfield, Kan., one night in October.

W. H. Miller's grain elevator and feed warehouse at Hartford, Conn., was burned the middle of October. Loss about \$1,500; fully insured.

Swan Labor, an employe in the Great Northern Elevator "A" at Minneapolis, Minn., received serious injuries recently by the slipping of a car puller.

The grain elevator at Bath, Ill., owned by the McFadden Co. of Havana, was burned in October. It was thought the fire was started by incendiaries. Loss, \$4,000. Insured.

The large grain elevator of Hill & King at McKinney, Texas, caught fire one night in October, but the blaze was extinguished by the city fire department before great damage had been done.

The grain elevator with 30,000 bushels of wheat at Bartlett, N. D., was destroyed by fire October 21. It is not known how the fire originated. The loss, which was considerable, is partly covered by insurance.

Koutner-Goldstein Co.'s warehouse containing wheat, barley, flour, etc., at Selma, Cal., was burned in a fire which swept over the packing house district at 8 a. m., October 21. Loss, \$15,000; insurance, \$6,000.

E. H. Bailey, foreman in the Hawkeye Elevator at Davenport, Iowa, had his right arm torn from the shoulder on the morning of October 23, by being caught in the machinery. He died later as a result of the accident.

The Jacobson Elevator at Minot, N. D., was set on fire by incendiaries one night in the latter part of October and was only saved from destruction by the prompt work of citizens who saw the blaze before it had gained great headway.

Fire destroyed the grain elevator at Ontarioville, Ill., owned by H. W. Schnadt, at 4 a. m., October 31. About 600 bushels of oats were burned. Loss, about \$3,000. The fire was thought to have been caused by a spark from a passing engine.

The grain elevator owned by Ewart & Wilkinson Grain Co. at Hoag, Neb., was struck by lightning and burned early on the morning of October 14. There was a considerable amount of grain in the building, which was also consumed. The loss is \$4,000, partially covered by insurance.

The large elevator at Stockdale, Ill., owned by the Rock Island Co., was burned on the morning of October 24. The fire started at the bottom of the elevator, and it was thought that it was caused by spontaneous combustion. The loss is between \$7,000 and \$8,000, partially covered by insurance.

The supports under the Farmers' Elevator at Kensal, N. D., gave way recently and the high structure dropped a distance of about three feet. It contained 42,000 bushels of wheat and 10,000 bushels of flax. Nothing could be done toward repairing the house until the grain was shipped out.

The Great Western Cereal Co.'s elevator at Muscatine, Iowa, was damaged by fire on October 15. The fire was first discovered in the cupola and was caused by a spark from a switch engine. The building was saved. Fifty thousand bushels of oats were damaged. The loss is \$15,000, covered by insurance.

The W. F. Hammond Elevator at Elgin, Neb., was struck by lightning during a severe thunderstorm on the afternoon of October 19. A small part of the accumulated dust near the top of the elevator was set on fire but did not blaze very long, as it had died to a smoulder when it was reached. When the bolt struck the house, C. A. Button, an employe in the elevator, was in the engine room with James Wallace. Neither was

injured nor felt the shock at the time, but Mr. Button said that he noticed the effects of it to some extent afterward.

Letcher & Witt's warehouse at Richmond, Ky., was damaged by fire on the night of October 27. The fire started on the third floor from an unknown cause. The warehouse contained a large amount of wheat at the time.

A fire caused about \$1,000 damage in the Delaware, Lackawanna & Western Railroad Company's steel elevator at Bangor, Me., at 11 a. m., November 3. The flames started at the bottom of the elevator by an overheated journal. It was put out by the city fire department. The damage was done mostly by water.

The Minneapolis and Northern Elevator at Park River, N. D., was damaged by fire in October. Before it was discovered the fire had eaten its way through the side of the building about half way up the height of the elevator. It was, however, extinguished before doing serious damage. It is not known how the fire originated.

The large grain elevator and feed mill, owned by Knopsen & Haug at Richland, Mich., was totally destroyed by fire on the afternoon of October 25. About 12,000 bushels of grain also burned. It was thought the fire originated from a spark from a passing engine. The loss on the grain was about \$15,000 and that on the building \$8,000. A partial insurance was carried.

The Twin City Elevator, located at Tagos, N. D., collapsed on October 26, with its load of grain. From 8,000 to 10,000 bushels were spilled out over the ground. The structure parted in the middle and one-half fell to the east side and the other half to the west side. There was no one in the elevator at the time the accident occurred. The damage is estimated at about \$4,000.

Nelson & Tipler's grain elevator at Geuda Springs, Kan., was burned one morning in October. The elevator had a capacity of 25,000 bushels and contained about 10,000 bushels of wheat, which was destroyed. There were also corn cribs alongside containing about 5,000 bushels of new corn which was burned with the elevator. The fire started from an unknown cause. The loss was about \$25,000, partly covered by insurance.

E. E. Ingold, the manager of the Ingold Elevator at Milbank, S. D., met with a serious accident in October. As the day was chilly he had put on a duck coat, and in attempting to put a belt upon a shaft the coat caught on a set-screw and he was whirled around the shaft several times before the engine was stopped. Although he suffered severe bruises, there were no bones broken and he received no internal injuries.

G. W. Lynn, superintendent of the Goemann Grain Co.'s elevator at Mansfield, Ohio, met with a peculiar accident on the morning of October 20. His foot became entangled in the slack rope of one of the grain shovels which is used to take up the grain, and he was drawn up the shaft, head downward, until the machinery could be stopped. The rope caused a serious sprain to his ankle and it was at first thought that he had suffered severe injuries. He was confined to his home for several days as a result of the accident.

Fire destroyed the Farmers' Co-operative Elevator at Hastings, Minn., between 12 and 1 o'clock on the morning of October 19. The flames were first discovered coming through the roof of the building, and it was thought that it was caused by a hot journal on the shafting in one of the upper stories. Between 25,000 and 30,000 bushels of grain, mostly oats, was consumed. The elevator was a wooden structure about 80 feet high, covered with corrugated iron, and had a capacity of 120,000 bushels. The loss is \$15,000, with a partial insurance.

The McEwen, Dougherty & West Elevator at Sarles, N. D., had a narrow escape from being burned recently. An attempt was made to start the engine when it was found that the cylinder contained too much gasoline. About two gallons were taken from it and this was thoughtlessly left near the spark. When the engine was again started a spark dropped into the gasoline and instantly the flames spread upwards toward the ceiling. Very fortunately the bucket containing the gasoline was gotten out of the house before it had set fire to the building.

A New York state poultry raiser says he has discovered that cow peas make hens lay. Last winter he left an acre of the peas uncut and his hens ate them. He was surprised to receive double the number of eggs during the winter.

The Drumheller Bros., near Walla Walla, on October 25 sold 95,000 bushels of wheat grown on their ranches to the Jones-Scott Grain Co., for \$63,175. This is the biggest single deal in Walla Walla this season. It was paid for by one check.

CROP REPORTS

Reports say that more plowing will be done in the Dakotas this fall than has been done in any previous year.

Wheat fields of Kansas were greatly benefited by needed rains the last part of October, and wheat throughout the state was doing finely.

The corn crop of Indiana is given at 170,000,000 bushels, the largest crop for the past ten years; oats crop 70,000,000 bushels, and the wheat crop 30,000,000 bushels, more than twice the crop of last year.

Michigan November report gives the condition of wheat as 95, against 99 last year. Corn yield, 34 bushels per acre, with a total of 37,000,000 bushels. Clover, large acreage, but total yield a trifle larger than last year.

Frank O. Fowler, secretary of the Northwest Grain Dealers' Association, in a recent circular, estimates the crop of wheat in Manitoba and Northwest Territories at 86,810,400 bushels; oats, 66,311,800; barley, 13,447,800, and flax, 478,130 bushels.

All through Nebraska the condition of winter wheat is given as better than the average at this time of the year. The acreage is about 5 per cent larger than last year, and in very many sections most of it is sown and out of ground. The corn crop is estimated at 240,000,000 bushels.

Farmers throughout Oklahoma are not expected to plant as large an acreage of wheat this year as usual, on account of the better results obtained from other grains. The state board of agriculture estimates the corn yield this year at 38,000,000 bushels, an increase over that of last season.

Kentucky's November crop report says corn condition is 101, against 105 a month ago. Wheat area sown 98 per cent of past five-year average. Oats only 78 per cent average area sown, and rye 93. Clover condition 99 per cent, good start. Kentucky corn crop averages 75,000,000 bushels. Last year it was 86,000,000 bushels.

Averaged reports from Iowa grain dealers of November 1 to Secretary Wells indicate the following yields in Iowa, to wit: Corn, 39½; oats, 35 6-10; spring wheat, 14; barley, 28½; flax, 10¼, and timothy seed, 5 bushels per acre. Reports of September 1 indicated a yield of 36 bushels of oats per acre and reports of October 1 indicated a yield of 40 bushels of corn and 36 bushels of oats per acre.

Corn husking in Illinois had progressed far enough by November for the farmers to determine the size of their crop and the quality of their grain. The crop in the state as a whole is not nearly so large as many people anticipated. While some fields in favored localities are making 75 bushels to the acre, in a great many more the product will not run over 30 to 40 bushels. Wheat is going into the winter in fine condition, as recent copious rains have been just what was needed to insure a vigorous growth.

The report of the Ohio Department of Agriculture on November 1 says: The estimated area seeded to wheat for the harvest of 1906 is 1,866,467 acres, a shortage of 22,521 acres, making this one of the lowest areas seeded in a number of years. Corn prospects are estimated at 100 per cent. Husking is well advanced and the yield is variable, being reported from light to excellent. Considerable corn is of poor quality, unfit to crib without sorting, being moldy and affected with rot. However, the greater part of the crop is reported as excellent, both in yield and quality.

The government report November 10 indicates a total yield of about 2,707,993,540 bushels of corn, or an average of 28.8 bushels per acre, as compared with an average yield of 26.8 bushels, as finally estimated in 1904, 25.5 bushels in 1903, and a ten-year average of 24.9 bushels. The general average as to quality is 90.6 per cent, as compared with 88.2 last year, 83.1 in 1903 and 80.7 in 1902. It is estimated that about 3.3 per cent of the corn crop of 1904 was still in the hands of farmers Nov. 1, 1905, as compared with 3.6 per cent of the crop of 1903 in farmers' hands Nov. 1, 1904; 5.2 per cent of the crop of 1902 in farmers' hands Nov. 1, 1903, and 1.9 per cent of the crop of 1901 in farmers' hands Nov. 1, 1902. The preliminary estimate of the average yield per acre of flaxseed is 11.2 bushels, as compared with a final estimate of 10.3 bushels in 1904, 8.4 bushels in 1903 and 7.8 bushels in 1902. The average as to quality is 94.6 per cent, as compared with 92 one year ago and 84.9 in 1903.

The following table exhibits the estimated acreage and production of corn in the United States for 1905, according to the October report of the

Department of Agriculture, of acreage and condition compared with reported production in 1904 (000's omitted):

	1905. Acreage.	1905. Yield, bus.	1904. Yield.
Maine	13	465	510
N. Hampshire.....	27	941	753
Vermont	58	1,972	2,133
Massachusetts	45	1,565	1,596
Rhode Island.....	10	343	337
Connecticut	55	1,830	2,120
New York	613	19,126	17,079
New Jersey	278	6,394	10,449
Pennsylvania	1,442	49,028	48,535
Delaware	191	4,083	5,688
Maryland	627	16,590	21,213
Virginia	1,859	36,065	42,890
N. Carolina	2,705	35,165	40,705
S. Carolina	1,878	22,536	22,189
Georgia	4,299	48,911	47,334
Florida	643	7,552	6,640
Alabama	2,904	38,943	41,877
Mississippi	2,099	26,670	39,709
Louisiana	1,460	18,133	27,258
Texas	6,532	99,287	136,702
Arkansas	2,215	38,031	48,332
Tennessee	3,139	69,919	80,890
West Virginia.....	765	20,326	19,176
Kentucky	2,995	79,357	86,815
Ohio	2,973	105,536	99,628
Michigan	1,229	39,328	36,990
Indiana	4,605	173,240	143,396
Illinois	9,617	350,820	344,133
Wisconsin	1,504	50,000	45,119
Minnesota	1,506	48,644	41,809
Iowa	8,767	307,721	303,039
Missouri	6,014	209,287	151,522
Kansas	6,978	229,274	134,609
Nebraska	8,035	296,295	206,942
South Dakota	1,622	52,390	43,855
North Dakota	89	2,731	1,914
Montana	4	87	86
Wyoming	2	52	72
Colorado	116	3,016	2,415
New Mexico	39	795	778
Arizona	6	124	144
Utah	11	272	380
Idaho	5	117	156
Washington	10	234	242
Oregon	18	457	495
California	55	1,619	1,556
Oklahoma	1,901	47,335	48,611
Indian Territory	1,904	53,122	54,625
Total	93,864	2,635,728	2,467,480

The corn crop of the United States for the past seventeen years, as officially reported, was as follows:

1905.....	2,707,903,540
1904.....	2,467,480,934
1903.....	2,244,176,925
1902.....	2,523,648,312
1901.....	1,522,519,891
1900.....	2,105,102,516
1899.....	2,078,143,933
1898.....	1,924,184,660
1897.....	1,902,967,933
1896.....	2,283,875,165
1895.....	2,151,138,580
1894.....	1,212,770,052
1893.....	1,619,496,431
1892.....	1,628,464,000
1891.....	2,060,154,000
1890.....	1,489,970,000
1889.....	2,112,892,000

OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

Wm. A. Bell, Millbrig, Ill.
 F. E. Benuett, Geneva, Ill.
 A. S. Kaiser, Centralia, Ill.
 B. W. Dedrick, Waldron, Ill.
 J. L. Hisey, Muskegon, Mich.
 H. W. Marsh, representing Nordyke & Marmon Co., Indianapolis, Ind.
 S. W. Strong, secretary Illinois Grain Dealers' Association, Pontiac, Ill.
 T. B. Marshall, president Ohio Grain Dealers' Association, Sidney, Ohio.
 John F. Courcier, secretary Grain Dealers' National Association, Toledo, Ohio.

A number of heavy shippers met at Durand, Mich., on October 24 and organized the American Shippers' Association, Ltd., the object of which is to assist shippers in getting better service and to secure redress from railroads.

BARLEY AND MALT

The directors of the Davenport Malt & Grain Company, Davenport, Iowa, have organized by electing officers as follows:

Robert A. Kirkpatrick, Milwaukee, Wis., has been granted United States letters patent No. 802,813 on a system of ventilation for malt house compartments.

The Denmead Malting Co. of Baltimore has been dissolved, owing to the fact that the corporation was too far from the barley producing country to do business.

It is said that Robert Nunnemacher is one of the Milwaukee capitalists interested in the new malting plant to be located near North Avenue station, Milwaukee, Wis. This plant, it is said, will add several hundred thousand bushels to the capacity of the elevator now there.

Notice has been given that the plan for the reduction and readjustment of the capital of the American Malting Company, dated July 6, has been declared operative by the committee. Application has been made to the New York Stock Exchange to list the certificates of deposits of stock with the Standard Trust Company.

On October 23 the inspection and grading of barley brought to Manitowoc, Wis., by farmers was resumed by grain buyers of that city on the basis of last year. The plan is to have two inspectors, one on each side of the river, who will take samples from the load and give an inspection ticket with a grading, and this ticket will govern the price paid.

The SS. Siberia which sunk off Long Point on her way to Buffalo, had on board 91,000 bushels of barley, which is a total loss. The Siberia sprung a leak about 25 miles west of Long Point in the gale of October 20. The captain and crew managed to keep the boat afloat until within the shelter of Long Point, when the boat sank in about 18 feet of water. She could not be raised.

Barley drying is of particular value in the brewing industry. For the properties of a dry grain, its resistance to external influence and to grain rot, are greater and better than in moist grain. Dry grain retains its germinating power longer and renders the purchase cheaper on account of higher content of dry substance. A dry barley has greater value, for which reason agriculture is also greatly interested in the drying question. For milling, vessel transportation, insurance and machine works, also, the question of the drying of grain is gaining in importance.—Hoffman.

Among the items going to make up the profits of the American Malting Co. for the year ended August 31, 1905, was \$329,358 entered as "claims settled with the directors." This sum represents the repayment into the treasury of moneys disbursed in unearned dividends for which the directors legally were held responsible. As usual, the board was accused of making the disbursement in order to unload stock, conveying the impression, meanwhile, that the company's earnings were equal to or above dividend requirements. The company has been doing well of late. It has wiped out about a million dollars of debts since 1899 and at September 1 had a surplus of \$579,982. The net profits were equal to 2.8 per cent on \$14,440,000 of preferred stock.

THE PROFIT IN GROWING BARLEY.

Senator H. P. Bird of Wausaukee, Wis., sends the local paper the following as his experience with barley in 1905:

"The growth was large—too large, for the continuous rains of the summer and frequent strong wind caused the grain to fall down. Probably one-third of it was lodged. Also this unusual wet season made the grain a little dark in color. Kernels were large and full—above the average, I am told. The harvesting was not 'clean,' so much of the grain was lying almost flat on the ground. The yield was 45 bushels per acre. This was shipped to Leisen & Henes of Menominee, and I received 45 cents for 50 pounds delivered. The freight was 7½ cents per hundred pounds, or 3¼ cents per bushel; net on cars here, about 42 cents for 50 pounds (a bushel in Wisconsin is 48 pounds). The net per acre will figure out \$18.50 to \$19.00.

"The cost of cultivating and harvesting is the same as oats or any other grain. The market is quite as certain, and so far as I know the grain need not be held in stock, but can be shipped as soon as thrashed. Judging from my experience this year, barley is a good paying crop, and our soil is well adapted for its production."

In the country around Dayton, Wash., which seems peculiarly suited to barley, and where nearly 50 per cent of the land last crop was in barley, the yield this year was from no reduction in price on account of smut, as has been the case with a large proportion of the wheat crop in the same district. The price of barley is better than wheat at the prevailing price, to say nothing of the loss occasioned by smut in the wheat.

IMPORTS AND EXPORTS OF BARLEY AND MALT.

Imports—	Bushels.	Value.
September, 1904.....	10,031	\$ 5,124
September, 1905.....	2	2
Nine mo. end. September, 1904..	38,535	19,470
Nine mo. end. September, 1905..	16,266	8,232

Exports—	Bushels.	Value.
September, 1904.....	689,542	371,071
September, 1905.....	1,970,165	945,345
Nine mo. end. September, 1904..	3,596,101	2,017,904
Nine mo. end. September, 1905..	7,597,349	3,886,131

BARLEY MALT.

Exports—	Bushels.	Value.
September, 1904.....	44,119	31,776
September, 1905.....	56,717	39,282
Nine mo. end. September, 1904..	386,746	276,663
Nine mo. end. September, 1905..	413,082	284,412

OBITUARY

Lee Patrick, a grain dealer of San Antonio, Texas, died recently.

Samuel Iveson Jr., member of the grain firm of Joseph Coke & Co. of Oxford, Pa., died October 30.

David S. Beals, manager for many years of the Detroit Railroad elevator at Detroit, Mich., died October 15.

Henry McElroy, a grain merchant of Roxbury Station, Boston, Mass., died October 29. He was 55 years of age.

Winfred R. Bruce, a prominent grain man of Groton, Mass., and member of the grain firm of F. A. Sherwin & Co., died at Boston City Hospital on the morning of October 18 from a fracture of the skull at the base of the brain, received through a fall. He was 27 years of age.

James C. King, a member of the Chicago Board of Trade and Chicago Stock Exchange, died November 1 at 75 years of age. He was born in Wheelock, Vt., and removed to Chicago in 1850, engaging in the lumber and grain business until 1888, when he retired. Of late years he had traveled extensively.

Henry P. Gill, formerly an active member of the Duluth Board of Trade and identified with the grain and milling interests of Duluth, Minn., recently died at his home in Salem, Ore. He had been in late years filling the position of underwriters' inspector for mills and elevators in Washington, Oregon and Idaho.

Calvin J. Grumfine, for the past thirty years grain inspector for the Baltimore Chamber of Commerce, died October 19. He was a native of Frederick County, Ind., where he was born in 1845, and removed to Baltimore in 1873. The board of directors of the Chamber of Commerce passed resolutions on his death. He is survived by a widow and four children.

Martin Whitcomb, a well-known business man of Minneapolis, Minn., died in October after a short illness. He was at the head of the grain, hay and feed firm of Martin Whitcomb & Co. and was highly esteemed by business associates. His death was due to a paralytic shock. He was 60 years of age and was a member of the Commercial Club and high in Scottish Rite Masonry and in the Shrine.

Herman Spruance, a pioneer grain dealer of Chicago, Ill., died at his home at 2400 South Park Avenue, Chicago, in October. He had been a resident of Chicago since 1861 and was a member of the Chicago Board of Trade for over 25 years, withdrawing in 1888. In 1891 he was appointed chief of the Bureau of Subscriptions of the World's Columbian Exposition, where he was instrumental in securing the funds for promoting the building of the fair. He was formerly a member of the Chicago, Calumet and Washington Park clubs. He was 73 years of age.

R. J. Willshire, a grain dealer of Freemantle, West Australia, was in Chicago recently, on his way to Manitoba. He said the object of his trip was to make arrangements for securing a good quality of Manitoba wheat for use for seed in his country.

PERSONAL

Albert Klucas is now buyer at the grain elevator at Bowdle, S. D.

O. N. Ruden has resigned his position as agent of the Duluth Elevator Co. at Atwater, Minn.

O. C. McGray has left Hallock, Minn., to accept a position as wheat buyer at Houghton, N. W. T.

K. O. Rew has been engaged as manager of E. A. Brown & Co.'s grain elevator at Hills, Minn.

E. Dotson, recently of Sanborn, Minn., has charge of the Kulm Roller Mills Elevator at Kulm, N. D.

M. W. Allen has been appointed grain buyer at Meridian, Okla., for the Union Grain Co. of Guthrie.

Jay Spaulding has resigned his position of manager of the La Rue Grain & Elevator Co. of La Rue, Ohio.

Will Quitmeyer has secured a position as manager of the Northland Company's grain elevator at Cordena, Minn.

Jacob Peterson has taken charge of the grain warehouse owned by the Northern Supply Co. at St. Croix Falls, Wis.

C. W. Joyner of Walters, Minn., has accepted a position as grain buyer for the Powers Elevator Co. of Kulm, N. D.

Butler Hart, recently in the grain business at Edgar, Neb., has accepted a position with Harris, Scotten Co. at Kansas City.

Wm. Schuett is local representative at Hankinson, N. D., of the A. J. Cummings Grain Commission Co. of Minneapolis, Minn.

J. W. Huff has left Moorhead, Minn., and has gone to Linton, N. D., where he is employed as buyer for the Exchange Grain Co.

Sam Morris, formerly of Shickley, Neb., has taken charge of a grain elevator owned by the Nye-Schneider-Fowler Co. at Oakdale.

J. J. Hogan, formerly of Benson, Minn., has taken charge of a line of elevators in North Dakota with headquarters at Granville.

Roy W. Stewart, agent of the Peavy Elevator Co. at Hawley, Minn., recently passed through a successful operation for appendicitis.

J. B. Conner, formerly of Milton, N. D., has gone to Conway, where he is buying grain for the Ely-Selyard Commission Co. of Duluth, Minn.

Oliver Thorne has resigned his position as buyer for the Osborne & McMillan Elevator at Fingal, N. D., and has been succeeded by Peter Honess.

Frank C. Poseley has been engaged as buyer in the Exchange Elevator at Bird Island, Minn., to take the place recently filled by J. W. Huff.

S. Treanor has given up his position as engineer in the mill and commenced on November 8 to buy grain at the Columbia Elevator at Hector, Minn.

Frank L. Brown is local manager at Mitchell, S. D., of the business of the A. J. Cummings Grain Commission Co. of St. Paul and Minneapolis, Minn.

J. J. McGraw, who has had charge of the elevator at Grandin, N. D., for the past two years, has been engaged as agent of the Duluth Elevator Co. at Park River.

S. J. Gilmore has resigned his position of grain buyer at the Columbia Elevator at Riverview, Minn., and L. Du Houx received the appointment to the vacancy.

J. K. Murta has resigned his position as freight agent of the Rock Island Railroad at Argenta, Ark., to accept a position with the Arkansas Mill & Elevator Co. of Fort Smith.

Hon. W. F. Kelson of Hallock, Minn., member of the State Board of Grain Appeal, has closed out his interest at Hallock and moved to Minneapolis, where he will make his future home.

George Munford of Two Harbors, Minn., has resigned his position of assistant warehouse registrar in the Minnesota Grain Inspection Service at Duluth and will devote his time to other interests.

Lemuel Southworth and wife of West Stoughton, Mass., celebrated their golden wedding anniversary recently. Mr. Southworth has been engaged in the grain business at West Stoughton for very many years.

Horace G. Burt, former president of the Union Pacific Railroad, is expected to locate in Omaha and engage in the grain business. His interests in grain elevators in the West is already extensive and the firm which controlled his grain

interests leased offices in the Omaha Board of Trade Building on November 1.

A. M. Hansen has been appointed agent for the Peavy Elevator Co. at Butterfield, Minn.

Assistant Grain Inspector Joseph Wirth of the Baltimore Chamber of Commerce recently resigned his position to accept the place of assistant superintendent of the Central Elevator Co. of Baltimore.

R. H. Conyers, who for the past several years has been employed in the grain department of the Oklahoma Export Company, has resigned that position to take charge of the Midland Mill & Elevator Company's affairs at Tulsa, I. T.

SEEDS

James Currie, vice-president of the wholesale seed firm of Currie Bros. Co. at Milwaukee, Wis., died recently.

The Northrup-King Seed Co. of Harbor Springs, Mich., commenced the operation of its seed warehouse the last part of October. A large number of hands are employed.

The Robinson Seed Co.'s Warehouse No. 4 at Waterloo, Neb., resumed operations in November, with E. N. Pike in charge. The company's warehouse is very conveniently arranged for handling seed, and is situated in a good district.

Shippers of seeds should use great care in making use of only desirable and merchantable bags, as it is to their interest to do so. Bags that are torn, dirty, marked or otherwise disfigured, reduce the price of the seed when passed upon by the seed inspector.

The Montgomery Blue Grass Seed Co.'s plant at Mount Sterling, Ky., was destroyed by fire on the morning of October 14. It is thought the fire originated from a spark from a passing engine. It contained a large amount of seed at the time, which, with the machinery, was totally consumed. The loss on the buildings is about \$6,000; on the machinery \$7,500, and on seed about \$45,000. The total insurance carried is about \$30,000.

C. A. King & Co.'s very comprehensive report covering Ohio, Indiana, Michigan, Illinois and Missouri says that the clover seed crop is short. It is very irregular and aggregates about the same as last season. Quality trifle better than last year, but of 1,219 reports recently received 113 said that quality was much better than last year; 303 trifle better; 367 about the same as last year; 235 trifle worse and 101 much worse. There were 475 said that most farmers were still holding; 146 said about one-half had sold freely; 369 said majority had sold freely, while 136 said there was none to sell.

The Minnesota Seed Co.'s warehouse at New Ulm, Minn., is about completed. The building is in the form of a parallelogram, two stories in height, with a basement about the same as a story, so that it is practically three stories high. The basement of the structure is composed of cement blocks and the walls above the basement are of brick. The new seed company opens under very favorable circumstances both as to season and prospects for business. There are already large orders on hand, with indications for an excellent trade. The general manager and secretary of the company is Fred Meier.

R. Liefmann Sons of Hamburg, Germany, in their clover seed report for October, say that they will probably have a medium crop as a whole, but not so good as last year. Alfalfa crop will be sufficient of medium qualities to cover own requirements. Crop of Turkestan alfalfa is medium, qualities good. Austria and Hungary have better yields than last year and qualities are nice. France complains of a small crop, while in Great Britain the output will be much smaller than the year before. Reports affirm that the Chili crop will be smaller than the past season. Germany counts on a medium crop.

A La Conner, Wash., reporter says: "What the oats yield this year, as a whole, doesn't compare with 1904, yet it must be remembered that 1904, like 1888, was a remarkable year. In 1888 the largest yield on record was made, viz., 176½ bushels per acre on the Wilke place, two miles north of La Conner. In 1904 occurred the famous record of William J. Armstrong of 1773-16 bushels per acre on four acres on his place one mile east of La Conner. Still, some excellent yields are reported this year, viz.: Thomas Tait, 7,000 sacks on 225 acres; J. T. Squires, 4,014 sacks on 129 acres; P. Olson, 5,000 sacks on 120 acres; Miles Fulk, 520 sacks on 10 acres.

THE GAS ENGINE PROBLEM IN WINTER.

We find that reference to gasoline mixture or gas mixture in the minds of many persons means only the admission of suitable proportions of air and gasoline into the cylinder. Consequently it is not an unusual thing to find an operator manipulating his fuel valve and throttling the air passage in a vain endeavor to secure a right mixture. It is important, and very much so, that the proper portions of air and fuel are admitted. But when the air and fuel passages are clear and manipulation of the valves and air passages seems to make matters worse, it is time to consider other things that might affect the mixture. You may admit the exact proportions of air and gas to make the best mixture and the most vigorous explosive, but if the conditions within the cylinder are not favorable to its reception it will be hard to get good ignition results out of it. The admission of a good mixture into a freezing cold or a damp combustion chamber is of little or no avail. In fact, it is this condition of the cylinder that is largely responsible for the reputation which the gasoline engine has gained for hard starting in wintertime. When operating the engine with a fuel that does not have to be converted from a liquid to a gaseous state as it enters the cylinder, hard cold weather starting is not experienced. The engine operating on natural or artificial gas will start as easily and as readily in cold as in warm weather. But it requires a certain degree of heat to quickly vaporize or convert the liquid fuels into a gaseous state so that the air will readily unite and mix with them. The trick, then, for cold weather starting of a gasoline engine depends on bringing about the right condition of the cylinder to receive and aid the mixture. The condition can be helped by heating some point of the air or inlet passage with a torch, and this is the common practice, but the best results can be obtained by directing the hot flame from a plumber's blow torch right into the combustion chamber, against the piston, for a minute or two. Nearly all gas and gasoline engine cylinders have either a spark or valve port through which the flame can be directed by the removal of the plug. By this means a summer temperature is quickly created within the cylinder, which is quite essential to the vaporization and proper mixing of the liquid fuel admitted with the air. Heat is even more essential with such liquid fuels as kerosene and alcohol. And where these are employed the use of some mixer or carbureter which utilizes a part of the exhaust heat is found to be the most satisfactory. A good mixture, without the aid of artificial heat, with alcohol or kerosene, has not been accomplished or obtained. This latter assertion, without further explanation, might be questioned. But so far as we have been able to learn, we believe that it is the custom of all manufacturers who build alcohol or kerosene engines to either utilize a part of the exhaust heat in connection with the mixture before it enters the cylinder, or they employ high compression, which elevates the temperature within the cylinder to the ignition point, at which instant a jet of fuel is sprayed into the compression space and the high heat it encounters immediately causes ignition and combustion. But even by either of these means it's quite difficult to get a perfect mixture with kerosene, which is plainly evident by the black smoke and oily particles thrown out by the exhaust, which indicate imperfect combustion.

By a perfect mixture we should mean one that will bring about a perfect combustion; that is, consume all carbons or heat-producing elements and convert them into heat. With natural or artificial gas we can readily, with the ordinary heat of the combustion chamber, secure a mixture that practically produces perfect combustion. There are yet other adverse conditions that affect the securing of a good mixture. We may have the proper proportions and favorable heat conditions, but if the exhaust valve is opened too late or closed too early to prevent the cylinder from cleaning itself from the burnt gases of the previous charge, the fresh incoming charge must meet and mix with this burnt gas, which affects its igniting qualities as well as its perfect combustion. The very fact that the burnt gases of the previous charge are not allowed to escape freely and a portion of them pent up in the cylinder consequently, reduces the volume of cylinder space to the extent of the volume of burnt gases retained. Consequently there isn't room for a full fresh charge to enter. From half to three-fourths of a fresh charge is all that can enter, because there isn't room for any more. The result, with this reduced charge, can only be reduced power from the engine. It is a common belief among persons who have had no experience with the gas engine, that when more power is wanted, more fuel should be turned on. But we have shown you that to secure a perfect mixture only enough fuel is necessary to properly charge the volume of

air that can enter the cylinder. More is simply wasteful.

Air will take up a certain proportion of gas and gasoline vapor and mix or unite with it to make perfect combustion possible. This perfect mixture produces the greatest amount of heat possible, and an over or under charge of fuel would necessarily reduce the ignition as well as the heat-producing qualities of a certain volume of air.

The opening and closing of the exhaust valve at the proper time is just as important to proper mixtures as the manipulation of the fuel valve.

We have known operators who were convinced of bad mixtures and endeavored for weeks to correct them by directing all their attention to the fuel and air admission valves, never dreaming that the exhaust valve and its mechanism could have anything to do with the mixture. A worn cam and roller that actuate the exhaust valve are so many times the "suakes in the grass." In their worn condition they can only cause delayed and ineffective movement of the valve. Good mixtures, therefore, do not depend wholly on opening the fuel valve so far and throttling the air valve correspondingly, but quite as much on free opening exhaust, both exhaust and receiving valve movement in time, good valve seats, and a good piston with a set of true piston rings that will hold compression and expansion pressures thoroughly.—Thrashermen's Review.

THE CO-OPERATIVES

The Farmers' Elevator Company at Springfield, Minn., has employed a man to buy and sell live stock.

The proposition to build a farmers' elevator company at Kanawha, Iowa, has been dropped for the present.

The receiver of the Amboy Elevator Company of Amboy, Minn., has begun suit against 40 stockholders in the company to enforce an assessment of \$50 per share to pay debts.

The co-operative company organized at New Richmond, Ind., several years ago, has disappeared. The company erected the Union Elevator, which was equipped with modern and expensive machinery. It was operated on the mutual plan, and all the farmers in that section used it in marketing their grain. The scheme was not financially successful, and the receivership followed. The house brought \$15,000 at the receiver's sale.

Another chapter was added to the long story of the troubles of the Amboy Elevator Co. of Amboy, Minn., when, on October 16, Lamb-McGregor & Co. of Minneapolis began suit against about forty of the stockholders to satisfy an old judgment which was the first cause of the elevator men's troubles. The Lamb-McGregor Co. originally secured a judgment against the Elevator Co., and upon execution found the assets insufficient to satisfy the claims against the organization. A receiver was then petitioned for. Later the court issued an order authorizing an assessment of \$50 per share on all stock. About ninety members of the Amboy paid their assessments, and this action is to secure judgments against the remaining forty stockholders for the amounts of their assessments.

A St. Cloud, Minn., paper says: "This is the second season for the Sauk Rapids Farmers' Elevator Company, which made extensive improvements to its property prior to the opening of the purchasing season, but it is admitted that the company is doing business without much hope of profit. The prices paid by the St. Cloud mills for wheat are such that if they are met by the Sauk Rapids company their margin of profit is wiped out. Because of their milling-in-transit arrangement the St. Cloud mills are able to pay a price for wheat practically on the basis of the Minneapolis price, less the freight. If the Sauk Rapids elevator meets this price it leaves the management without a margin for conducting the elevator; and a delegation of farmers interested this week called on the St. Cloud millers and endeavored to get them to lower the price of wheat. The unusual spectacle of farmers asking to have the price of grain reduced was presented. The millers declined to make any reduction from present prices. This interview and its failure probably gave rise to the report that the elevator had gone out of business. A somewhat similar condition is reported from another city. Farmers were buying wheat, but the flour mills were paying a higher price. The farmers threatened to import flour and cut the price on that unless the mill would lower the price of wheat so it could be bought and shipped at a profit."

LATE PATENTS

Issued on October 10, 1905.

Seed Cleaner and Grain Separator.—James C. Benson, Troy, Ohio. Filed May 26, 1905. No. 801,207.

Grain Weighing and Measuring Apparatus.—Herrmann Grassley, Albany, N. Y. Filed October 20, 1904. No. 801,234.

Automatic Weighing Machine.—Robert D. Webb, Minden, La. Filed February 14, 1905. No. 801,490. See cut.

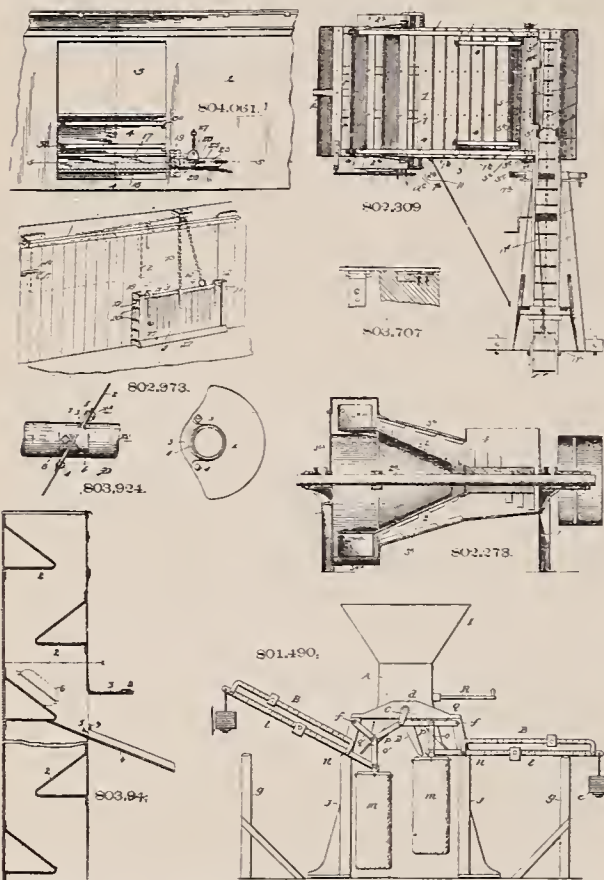
Automatic Weighing Machine.—Charles F. Beakbane and William E. Hipkins, Birmingham, England. Filed June 16, 1904. No. 801,706.

Automatic Weighing Machine.—Charles F. Beakbane and William E. Hipkins, Birmingham, England. Original application filed June 16, 1904. Divided and this application filed June 12, 1905. No. 801,822.

Issued on October 17, 1905.

Mechanism for Operating Bucket Elevators or the Like.—Otto Krell, Nuremberg, Germany. Filed November 8, 1904. No. 802,047.

Corn Sheller.—Daniel G. Elkenberry, Bloomington, Ill., assignor of one-half to B. S. Constant Co., Bloomington, Ill. Filed March 8, 1905. No. 802,273. See cut.



Combined Grain Elevator and Dump.—Daniel Otto, Danvers, Ill. Filed October 15, 1904. No. 802,309. See cut.

Issued on October 24, 1905.

Dust Collector.—George T. Meadon, New York, N. Y. Filed September 28, 1904. No. 802,651.

Grain Door for Cars.—Lossie Casteel, Marion, Iowa. Filed December 30, 1904. No. 802,973. See cut.

Issued on November 7, 1905.

Traveling Apron or Conveyor.—Isaac Trolley, Grantham, England. Filed December 20, 1904. No. 803,643.

Grain Door for Railway Cars.—Kistel Osel, St. Paul, Minn. Filed October 17, 1904. No. 803,707. See cut.

Spiral Conveyor.—Thomas McGrath and Frank McAndrews, Minneapolis, Minn. Filed May 29, 1905. No. 803,924. See cut.

Conveying Apparatus.—Thomas Wallace and Frank Nash, San Francisco, Cal. Filed May 10, 1905. No. 803,944. See cut.

Grain Door.—Jurgen Siemsen, Valparaiso, Neb., assignor of one-half to William L. Worrell, Valparaiso, Neb. Filed May 23, 1904. No. 804,061. See cut.

Speculators Try to Anticipate.—A dealer writes: "The speculative world lives largely in dreamland—it rarely enters into analysis, rarely reasons from a real common-sense standpoint, but rather accepts the flotsam and jetsam as it floats about.

Use caution in accepting all we hear from Russia, the great disturbing element in the market to-day. Russia is old in years as a nation. It follows her rulers know the temper of her people. She is prepared to cope successfully with any internal disorders. Strikes are not lasting, internal dissensions rarely long-lived, because in each the government asserts its superiority. The sensational conditions said to be existing in that big empire, and which are exerting such a material influence on the world's wheat markets, may to-morrow turn pacific, and thus at once remove the greater influence now under the wheat markets. Such a conclusion would not be impossible; in fact, it is even more than probable, and if this should occur the natural sequence would be a revulsion in values. Per contra, should Russia become involved in an internal revolution of her people, should anarchy instead of reason rule, should exportations of grain be stopped, we can readily figure its effect on the world's grain markets. These, however, in this enlightened age, appear quite unreasonable."—C. A. King & Co., Toledo.

TRANSPORTATION

Fort William and Duluth rates to Buffalo reached $4\frac{1}{2}$ cents on November 1, the highest in several years.

The congested condition of the Buffalo elevators had a very depressing effect on shipping for November business, on account of the delays in unloading. Rates of $2\frac{3}{4}$ cents were asked and obtained for some business in wheat.

Every effort will be made to keep navigation open at all of the Northern grain shipping ports as late as possible this year. At Canadian ports the government and steamship companies are arranging to have ice crushers in service at an early date and tugs will be freely used to keep the channels open.

On October 31 no less than 35 canal boats cleared from Buffalo for Eastern points, carrying about 400,000 bushels of grain. The capacity of canal-boats does not average more than 8,000 bushels of wheat and about 10,000 bushels of barley, so that the movement by this route is not large. Boats have been very scarce, and the rates paid have been very profitable to the boatmen.

The Chicago & Northwestern Railroad posted a notice on the Chicago Exchange November 10 to the effect that until further notice that road will not accept orders on grain consigned to any of the elevators at South Chicago of the South Chicago Elevator Co. when the grain is loaded in C. & N. W. or C., St. P., M. & O. equipment. The C., M. & St. P. R. R. has posted a notice also to the effect that it will not accept orders on grain loaded in C., M. & St. P. equipment for the Merritt Elevator until further notice.

The Loftus-Hubbard Elevator Company of St. Paul has obtained from the Minnesota Railroad Commission an order against the C., M. & St. P. Ry. Co., declaring a rate of 5 cents a hundred on oats from Hastings to St. Paul excessive and illegal, in view of the fact that grain is carried from Afton through Hastings for 4 cents a hundred. The Commission's order prohibits the railroad hereafter from charging a higher rate from Hastings than from Afton, and holds that the Loftus-Hubbard Company has reparation for the excess charge on 561,292 bushels of oats already shipped, amounting to \$56.13.

New rates have been announced from Kansas City, St. Joseph, Atchison and Leavenworth, in effect January 1, 1906, as follows:

To—	New Rates.		Old Rates.	
	Wheat.	Grain.	Wheat.	Grain.
Chicago	12	11	11	10
Galveston, export....	18	17	15 $\frac{1}{4}$	14 $\frac{1}{4}$
Mississippi River....	9	8	8	7
Memphis, beyond....	13	12	12	11
Peoria points	10 $\frac{1}{2}$	9 $\frac{1}{2}$	9 $\frac{1}{2}$	8 $\frac{1}{2}$
Minneapolis	12	11	11 $\frac{1}{2}$	10 $\frac{1}{2}$
Cairo, beyond	9	8	..	..

It will be seen that the greatest increase is on the rate to Galveston, where it is $2\frac{3}{4}$ cents over the old figure and the smallest increase is on the rate to Minneapolis, it being $\frac{1}{2}$ cent.

Chicago's wide tire ordinance, which was passed over a year ago, and which is to go into effect January 1, 1906, has been assailed by strong opposition made up of the Chicago feed dealers and other team owners in the city, who claim that to comply with the present law would necessitate an outlay of four million dollars to no purpose, as

even after this were done the damage to the street pavements would be greater rather than less than it is at present. The Wide Tire Association, which is composed of the team owners who favor the substitute measure, is not opposed to a wide tire ordinance, but favors one so framed so as to provide for a width of tire for the different services for which wagons are to be used, as would inflict the least damage to the paved streets. They claim that the cost of cartage in the city would be increased annually more than \$9,000,000 under the ordinance as at present framed, the Association, by investigation, having found from actual tests that on sod and dirt roads the wide tires draw easier, but on all pavements they draw harder than narrow tires.

HEEMAN HAS FAITH IN CORN.

In his regular market letter of November 1, Edward G. Heeman, speaking of corn, said: "Speculation in corn has increased immensely, and both have steadily advanced in price. The situation in corn is becoming quite bullish, with the market up only about 4 cents per bushel from the bottom. Husking returns show disappointing yields in most sections and estimates of the total crop are being cut down materially. The final government report is quite likely to show less than 2,500,000,000 bushels, not a burdensome amount, with no reserves of old corn, and the promise of a big export demand. The three largest crops of corn ever grown, 1902, 1903 and 1904, averaged about 2,250,000,000 bushels, with the average price about 50 cents per bushel. We have absolutely no reserves of the same, and I believe the one crop grown this year, which may turn out to be not much greater, is worth as much. Strong interests have accumulated a very large line of May corn and are predicting at least 50 cents per bushel. Possibly the first big rush of new corn will cause some setback, but I doubt if it sells much under 45 cents again."

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

FOR SALE.

One mill, consisting of machinery almost new for grinding hominy, meal and feed. Located in the heart of corn belt. A fine business proposition.

S. W. ALLERTON, Allerton, Ill.

MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

ELEVATORS

FOR SALE.

In northwestern Iowa, a 15,000-bushel elevator equipped with modern machinery and doing a good business. Good reason for selling. Address

LOCK BOX 713, Sioux Falls, S. D.

FOR SALE.

A half interest in a 150-barrel Great Western mill and elevator—detached. Located in the center of the wheat belt in Kansas. For description and price address

W. M. CHELF, Geneseo, Kan.

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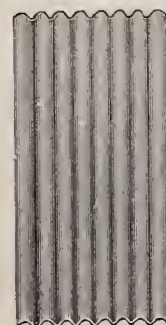
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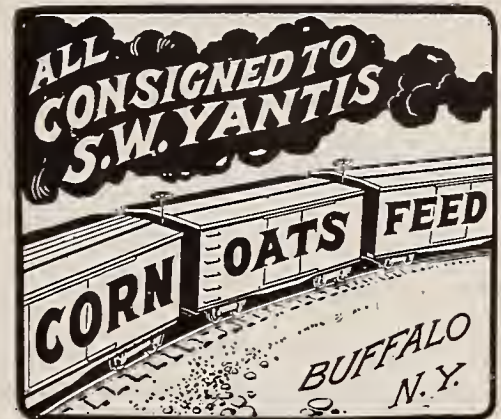
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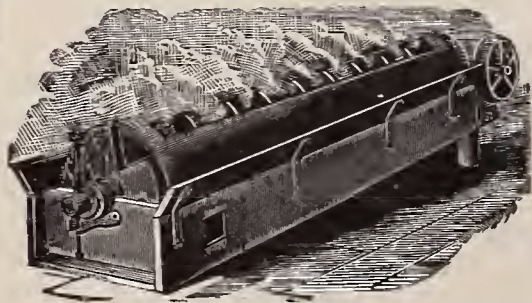
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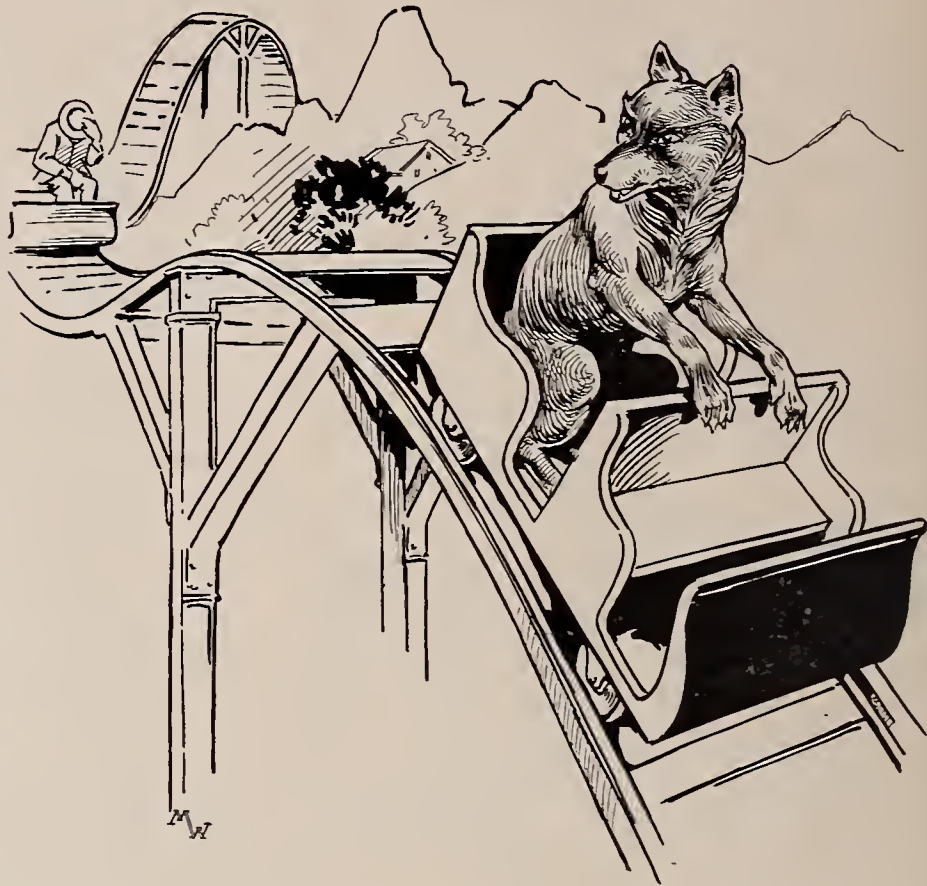
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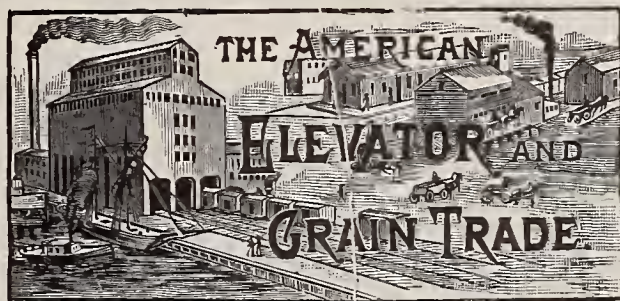
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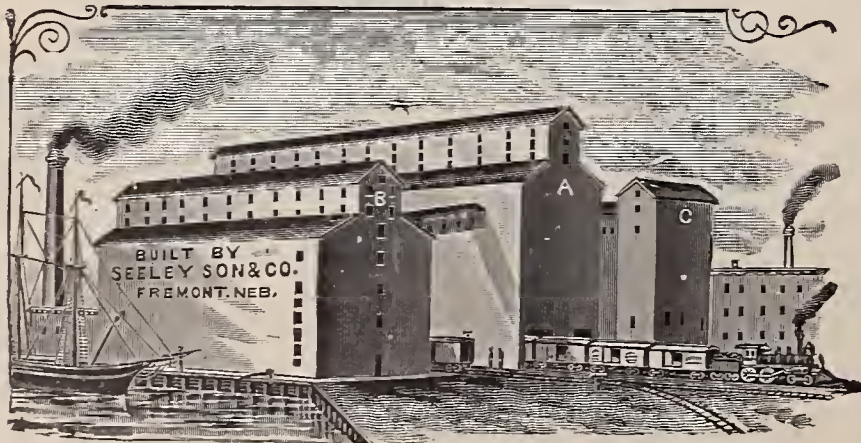
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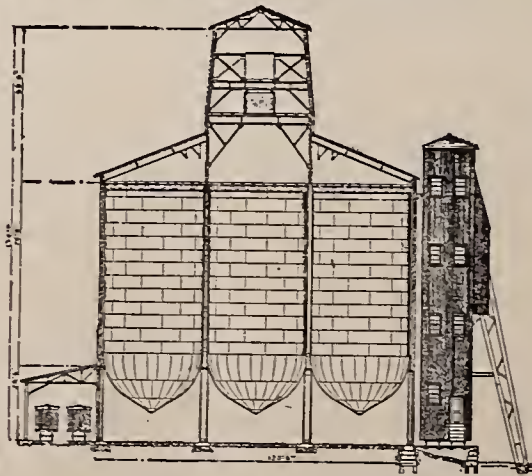
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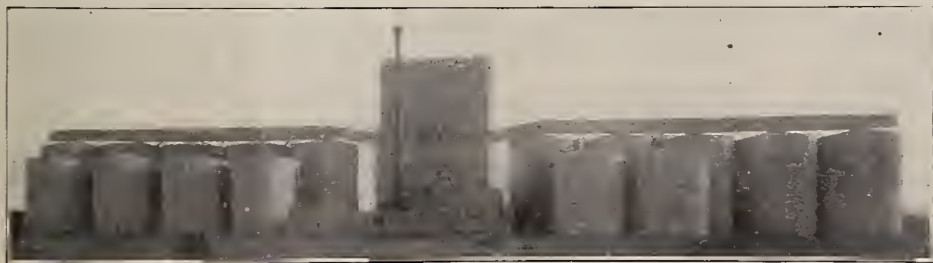
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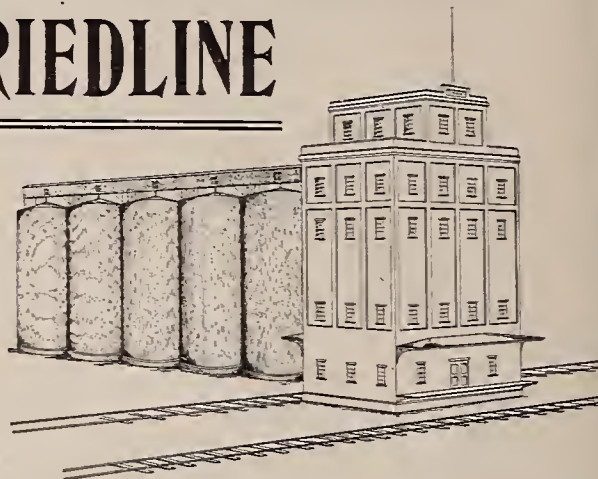
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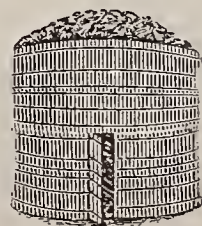
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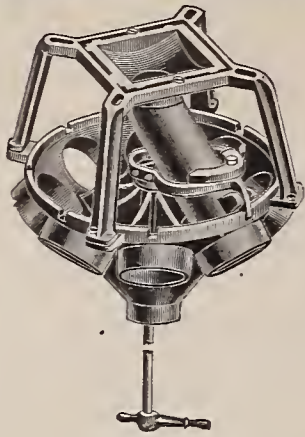
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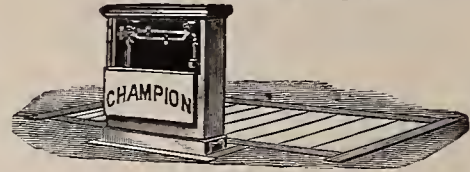


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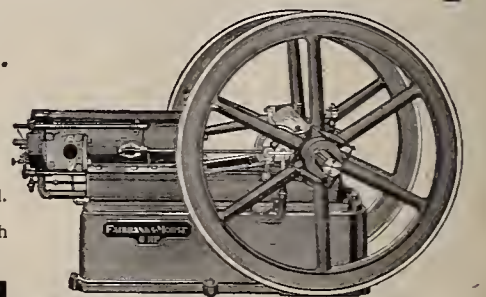
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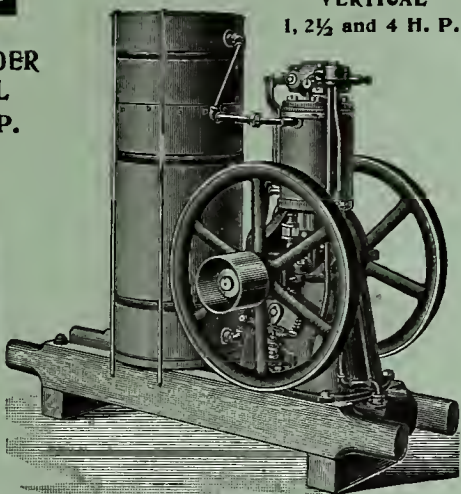
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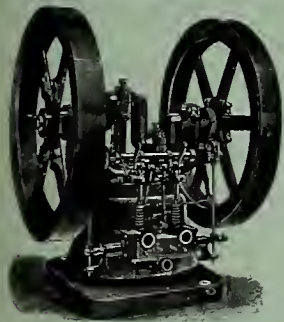
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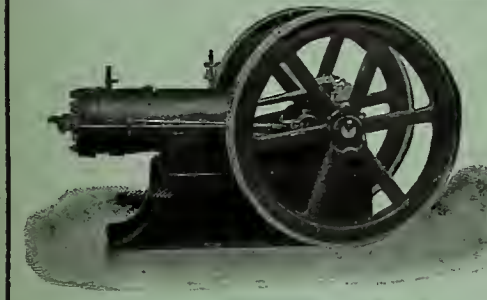
NEW ERA GAS ENGINE CO., 30 Dale Ave., Dayton, Ohio



**AT LAST!
A Gasoline Engine**

Which Anyone Can Run and Which is Effecting a Revolution in the Business. It is the "Master Workman." An upright engine with two cylinders. Superior to any one cylinder engine. It has no vibration and can work on a light wagon, or can be placed anywhere. All mechanism is in full view and all parts accessible. Starts easier and quicker than any one-cylinder engine. Has More Power, consumes less fuel, occupies less space, 2, 3, 4, 5, 6, 8, 10 and 16, 18, 20 Horsepower. Less complicated and has fewer parts than one cylinder engines. This is the 52d year of its manufacture, and Their Guarantee is absolutely to be relied upon. Every engine is sold on honor.

Agents and Buyers Wanted. Send for catalog. Mention this paper.
THE TEMPLE PUMP CO., 15th Place, Chicago, U. S. A.
Mfrs. of the Celebrated Diamond Windmills, also full line of Pumps, including Well Purifying Pumps.



The Easy Starting Lauson

A simple and reliable Gasoline Engine that is perfect in every detail. It is free from trappy and delicate parts that are liable to cause trouble. It will start as easy and work as well at 20 below zero as in warm weather. Write for our 1905 catalog describing our line of stationary and portable Engines from 2 to 20 H. P.

The John Lauson Manufacturing Co.
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The Best of Everything

Excellent Through Train Service to all points
North, West, and Northwest, via The
Chicago & North-Western Ry.

THE OVERLAND LIMITED

A magnificent electric-lighted train, less than three
days Chicago to San Francisco, daily.

THE COLORADO SPECIAL

One night Chicago to Denver. Only two nights to
Denver from the Atlantic seaboard.

THE NORTH-WESTERN LIMITED

An electric-lighted daily train between Chicago, St.
Paul, and Minneapolis.

THE DULUTH-SUPERIOR LIMITED

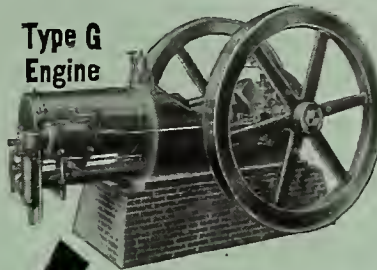
A luxurious electric-lighted train to the Head-of-the-
Lakes, daily.

Through trains Chicago to Cedar Rapids, Des Moines,
Mason City, Sioux City, Council Bluffs, Omaha, The
Black Hills, Denver, Salt Lake, San Francisco, Los
Angeles, Portland, St. Paul, Minneapolis, Duluth,
Superior, Ashland, and the Iron and Copper Country.

W. B. KNISKERN, Passenger Traffic Manager, CHICAGO, ILL.

N. W. 582

**Type G
Engine**



**8 to 100
H. P.**

OLDS ENGINES

RUN YOUR

ELEVATOR WITH ECONOMICAL POWER

The OLDS GASOLINE ENGINE is used by the U. S. Government. In sending out their last specifications for gasoline engines for West Point, the U. S. War Department required them "to be OLDS ENGINES or equal." They excel all others, or the U. S. Government would not demand them.

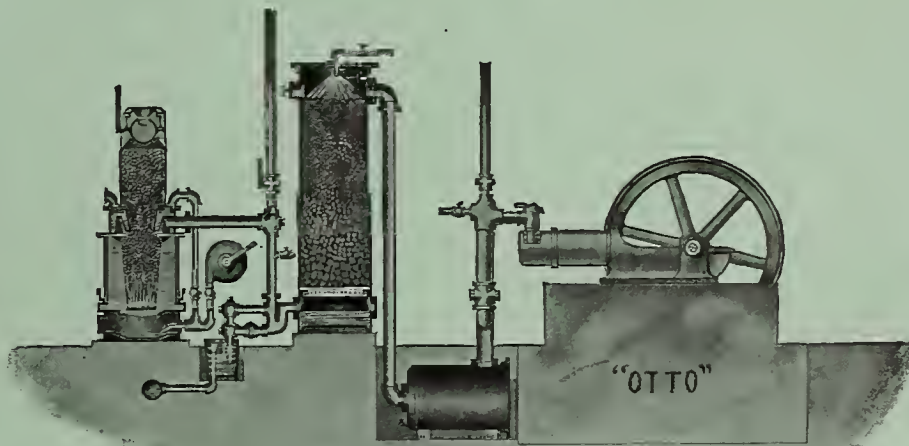
They are the horizontal type, 2 to 100 H. P., and are so simply and perfectly made that it requires no experience to run them, and

REPAIRS PRACTICALLY COST NOTHING

Send for a catalogue of our Wizard Engine, 2 to 8 H. P., (jump spark ignition system, the same as in the famous Oldsmobile), the most economical small power engine made; fitted with either pump-jack or direct-connected pump. Or, our general catalogue, showing all sizes.

**OLDS GASOLINE ENGINE
WORKS,
LANSING, MICHIGAN.**

**"Doing Better Than
We Promised"**



Robert Cleeland's Sons, manufacturers of carpets, Philadelphia, say:—"In reference to the No. 4 80-Horsepower Otto Suction Gas Producer and No. 10 Otto Gas Engine you installed for us, replacing our automatic steam engine and boiler, we are pleased to say that the plant is doing far better than you stated it would. It is proving exceedingly economical, as we are using less than one ton of coal per week, whereas formerly we used four to five tons for the steam plant; and it requires only a small portion of the engineer's time and no fireman."

Very gratifying both to the customers and ourselves. We can do as well for you.

**THE OTTO GAS ENGINE WORKS.
PHILADELPHIA, PA.**



4 GOOD POINTERS

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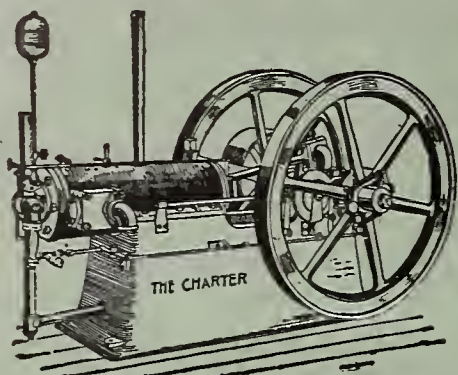
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- (1) It is Easy to Handle.
- (2) It is Strong and Durable, but Simple.
- (3) It will Grind the Most Feed with the Least Power.
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There is Only One Thing about



Stationaries
Portables
Hoisters
Pumping Outfits
Boat Attachments
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Dynamo Outfits

that has **NOT CHANGED** during the past 20 years, and that is

ITS RELATIVE QUALITY

We say "relative" because, while the "Charter" has always been the best in quality, yet the standard of quality and the character of the material have changed, so the quality of the "Charter" is far ahead of what it was; and it was good then, judging by the number of the early engines still in use and the reports on them.

For confirmation, turn to this ad for the past 7 months.
Send for Catalogue. State Power Needs

Charter Gas Engine Co., 400 Locust St., Sterling, Ill.

Are You Interested in Equipment

which reduces operating expenses? I have an appliance which will do the work now done by your fireman; will lessen the fuel bill, reduce the insurance rate, and in addition will give you a clean plant.

The expense of installing is nominal and I guarantee good returns on the investment. Write for booklet, describing my device.

H. L. DAY

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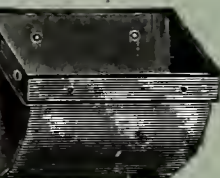
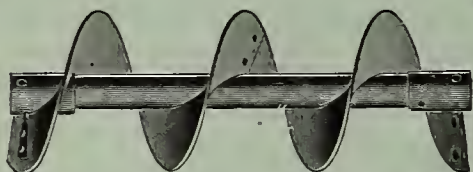


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115-123 South Clinton Street,
CHICAGO, ILL.

MANUFACTURERS

M. & L. Conveyors
Salem Buckets
Steel Grain Buckets
Steel Corn Buckets
Tin Mill Buckets



Elevator Bolts
Elevator Boots
Turn Heads
Flexible Spouts
Steel Spouting

SAFETY CUT-OFF AND ALARM MACHINES.

Send for Catalog and Prices. Our Goods are the Best on the Market.

"WELLER" SPECIALTIES

Complete Modern Equipments for Up-to-Date

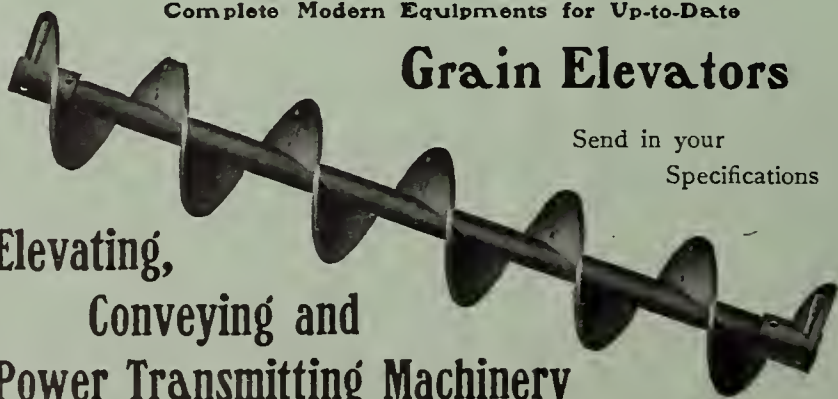
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Send in your
Specifications

Elevating,
Conveying and
Power Transmitting Machinery

SEND FOR NO. 18-C CATALOG

WELLER MFG. CO., CHICAGO, ILL.



West Shore Railway Co.'s Elevator Pier 7, Weehawken, N. J. Capacity 2,000,000 Bushels.
Complete Elevating and Conveying Equipment Furnished by Webster M'fg. Co.

WE ARE PIONEERS

IN THE MANUFACTURE OF

Grain Handling Machinery

Having equipped during the past twenty-five years many of the largest grain elevators in this country with our specialties.

Webster M'fg. Co. Chicago and New York

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Manufacturers of

MODERN GRAIN ELEVATOR MACHINERY

Two Large Factories

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CHICAGO OFFICE: 401 Monadnock Bldg.

The Atlas Car-Mover

Manufactured exclusively by

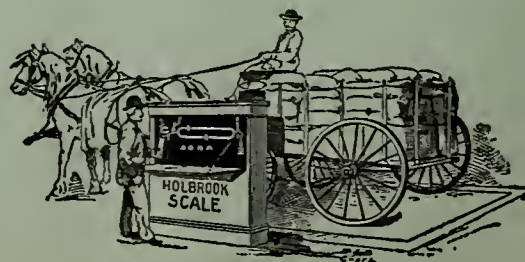
The Appleton Car-Mover Co.
APPLETON, WIS., U. S. A.

Is decidedly the best and most powerful Car-Mover on the market, and supersedes all others wherever introduced.

Try an "ATLAS." It Will Pay for Itself in a Few Hours' Use



CALLAHAN GAS and GASOLINE ENGINES



Grain Elevator Machinery and Supplies, Wagon, Hopper, Portable and Dump Scales.

C. D. HOLBROOK & CO.

305 S. Third St., Minneapolis, Minn.